



# ***CSDR Training***

*January 2007*

A collage of various military and defense-related images, including a satellite, a stealth bomber, a rocket launch, a helicopter, a tank, and a ship, serves as the background for the bottom right section.

**The On-line  
DoD Cost  
Research  
Library**

**Enhancing DoD Cost Analysis**

***The Defense Cost & Resource  
Center***

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***website***

***<http://dcarc.pae.osd.mil>***

# Outline

- Introduction & Purpose
- CSDR Training
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - Cost Data Collection
    - Reporting Forms
    - Validation
  - Software Resource Data Reports





# DCARC Training Team

- **Robert Currie**
  - 25 years cost research/estimating experience
  - Consultant to DoD Cost Agencies: OSD CAIG, DCARC, AFCAA, DASA-CE, NAVAIR, USATACOM
  - Experience in missile/ordnance systems, ground combat vehicles and electronic systems
  - Principal CSDR Instructor for 6 years
  
- **Jeff Cherwonik**
  - 16 years cost research/estimating experience, including use of CCDRs
  - Former government cost analyst with Naval Center for Cost Analysis
  - Experience in missile/ordnance systems, UAVs, and ground combat vehicles
  
- **Mike Gallo**
  - 16 years cost research/estimating experience, including use of CCDRs
  - Former government cost analyst with Naval Center for Cost Analysis
  - Experience in software cost estimating, military electronic & ship systems<sub>3</sub>

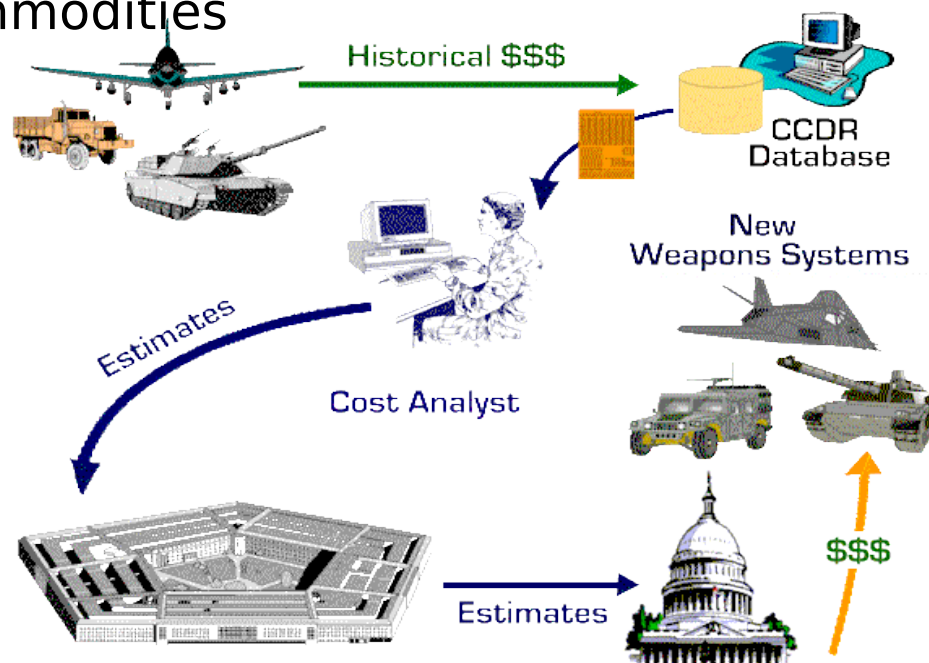


# Introduction

- Purpose
  - Provide instruction leading to successful CSDR plans and report submissions.
- This course is designed to:
  - Introduce the student to the CSDR process, forms, and stakeholder responsibilities using examples for each step in the process.
  - Provide examples designed to mimic acquisition programs.
    - *Examples do not capture all the nuances of every real-world acquisition scenario.*
- During training, student participation and questions are encouraged.

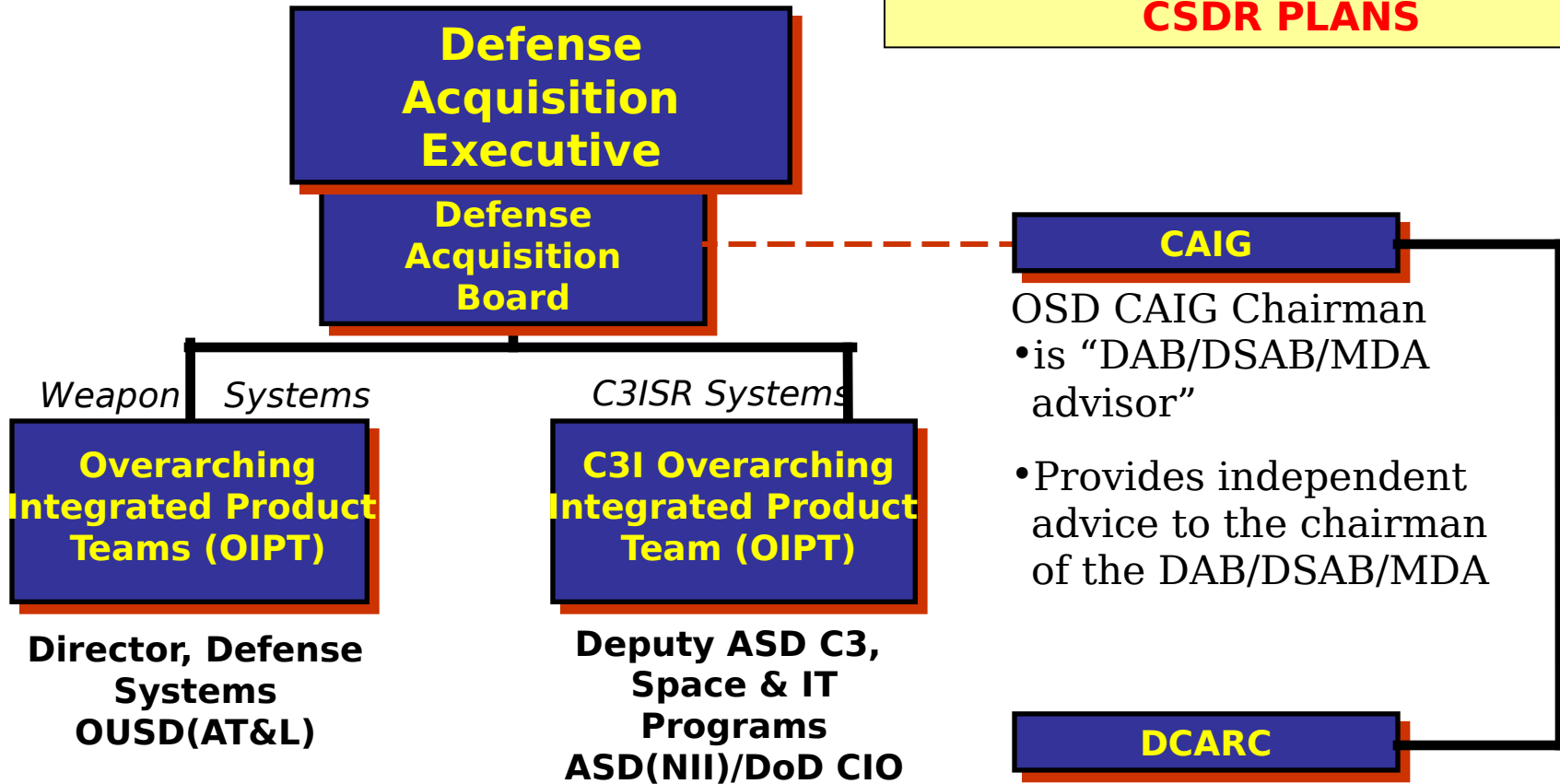
# Why Collect Contractor Cost & Software Data?

- Provide basis of cost estimates of future systems
  - Long and painful DoD experience has shown that “actual” costs of producing systems are, by far, the best basis for cost estimates
- Credible cost estimates lead to realistic budgets and executable programs
- CCDRs are DoD’s only systematic mechanism for capturing definitionally consistent actual cost data across weapon system commodities



# OSD Decision Makers & Advisors

**ONLY THE CAIG CHAIRMAN HAS  
AUTHORITY TO APPROVE/WAIVE  
CSDR PLANS**



DCARC ensures collection & delivery of cost data to DoD cost analysts

# DCARC Goal

- Collect and make available data that are:
  - Comparable (across programs)
  - Meaningful (level of detail that provides insight)
  - Transparent (well defined)
  - Accurate
  - Auditable





# DCARC Functions

- Manage the data collection process
- Facilitate development of cost reporting “Plans” to ensure consistency of data collection across Major Defense Acquisition Programs
- Provide secure data transfer conduit to receive historical contractor cost data
- Review and validate cost data
- Maintain cost data repository (DACIMS)
  - Defense Automated Cost Information Management System
- Provide Training

# Cost & Software Data Reports (CSDR)

- Two types of reports
  - **Contractor Cost Data Reports (CCDRs)** provide standardized cost information across program types
    - Recurring/non-recurring split by Work Breakdown Structure Element
  - **Software Resources Data Reports (SRDRs)** provide software information across program types
    - Size, effort, schedule, and other descriptive development data

# CCDR Requirements

- Required on all ACAT I Programs except ACAT IA
- Required on all contracts > \$50M
  - Including subcontracts that exceed \$50M threshold
- Required on high-risk or high-technical-interest contracts between \$7M-\$50M

Program Category	RDT&E	Production
ACAT I (D&C)	>\$365M	>\$2.190B
ACAT II	\$140 to \$365M	\$660 to \$2.190B
ACAT III	<\$140M	<\$660M

*Costs shown in FY2000 constant dollars*

# SRDR Requirements

- All major contracts and subcontracts, regardless of contract type
- Contractors developing/producing software elements within ACAT IA, ACAT IC and ACAT ID programs
- For any element with a projected effort greater than \$25M

Program Category	RDT&E	Production	Annual	Acquisition	Life Cycle
ACAT I (D&C)	>\$365M	>\$2.190B			
ACAT IA			>\$31.5M	>\$126M	>\$378M
ACAT II	\$140 to \$365M	\$660 to \$2.190B			
ACAT III	≤\$140M	≤\$660M			

*Costs shown in FY2000 constant dollars*

# Why CSDR Training?

- Provide specific guidance & examples to help you succeed in delivering quality cost and software data
- Provide real world examples of how your data has & will be used for DoD cost estimating



# CSDR Training Audience

Topics	Target Audience			
	Executives	Material Developers	Program Offices	Cost Analysts/ Estimators
Background	X	X	X	X
Policy	X	X	X	X
Program Plans		X	X	X
Contract Plans		X	X	X
Cost Reports		X	X	X
Data Validation		X	X	X
Data Utility		X	X	X

Key:

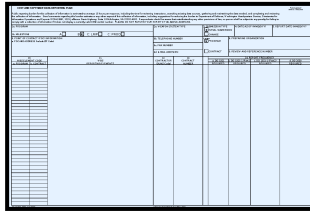
X designates responsibility

X designates supporting role and interest

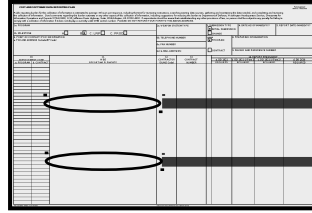
# Outline

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  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - Cost Data Collection
    - Reporting Forms
    - Validation
  - Software Resource Data Reports

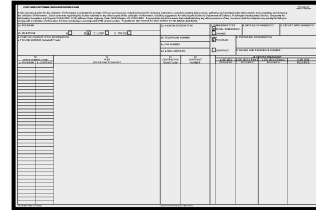
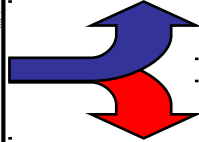
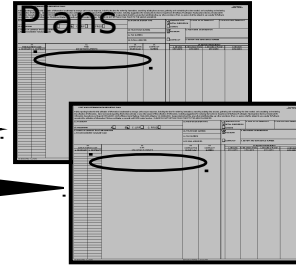
Program Plans



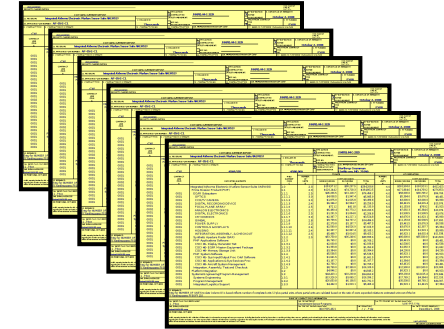
Contract Plans



Subcontract Plans



Cost Reports



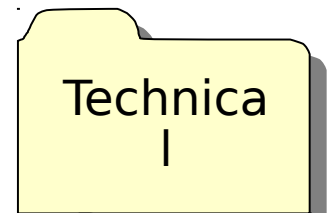
# CSDR Overview Tour

Analyst prepares normalized, standardized data set pooled from several programs

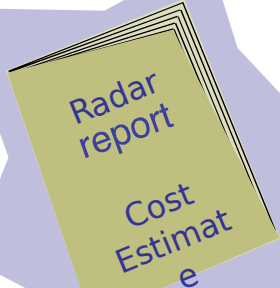
DACIMS Secure Repository



Technical Reports

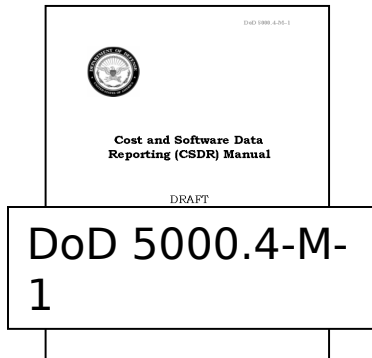


Radar				
	Nonrecurring Engineering Hours	Frequency	Power	Schedule
Program A				
B				
C				
D				
E				
G				
H				



- Conduct analysis
- Derive relationships
- Apply relationships to future program

# CSDR Plans Definition/Purpose



- C3.1.1 DOD Planning and Contracting – General Guidelines
  - “DD Form 2794...
    - is the key document in establishing reporting requirements throughout each phase of an acquisition program.
    - The CSDR Plan is needed for both the RFP process and the contract award process.
    - ... serve as the reference document for placing data requirements on contract
    - the source document used to compare with actual reporting data from contractors to ensure that data are reported as planned...”



# CSDR Plans

## Primary Contents

- Metadata
  - Program name, POC info, date, etc.
- WBS Reporting Elements and Codes
- Report Frequency by report type by WBS
- Submission dates
- Special End Notes by exception
  - Program Office Responsibilities
  - Contractor Instructions
- Important Attachments
  - Resource Distribution Table (*formerly Responsibility Assignment Matrix*)
  - Project Applicability Matrix
  - Technical Characteristics





# CSDR Plans

## Two Types of Plans

- Program Plan
  - Covers the **entire program** by phase
  - Based on relatively high level WBS
  - Serves as an overarching plan encompassing all reporting contracts
  - Included in CARD
  - Government Responsibility
- Contract Plan
  - Specific to a single contract
  - WBS detail driven by scope of work
  - Maps into Program Plan structure at high level
  - This type includes subcontracts (subcontract plan)
  - Government responsibility with varying levels of contractor support
- Both types of plans use the same form DD 2794

# CSDR Plans

## Example Scenario *(page 1 of 2)*

### Given: Notional Example SDD Phase Program

- Requires a **single Program Plan**
  - Ref. MIL-HDBK-881 Electronic/Automated Software Systems WBS
- Requires Contract Plans
  - For all contracts exceeding \$50M threshold
  - All high-risk, high-technical-interest contracts valued between \$7M and \$50M
- Acquisition Strategy
  - One SDD Phase prime contract awarded with Northrop Grumman
  - Subcontracts awarded
    - One exceeds \$50M reporting threshold, one is of high-technical-interest/risk
      - Requires two **Subcontract Plans**
        - » Raytheon: Synthetic Aperture Radar (Exceeds threshold)
        - » Optics R Us: Optics (high-technical-interest/risk)
    - Other subcontracts fall below \$50M reporting threshold (or no high-interest)
      - No CSDR Plans required

# SDD Contract Plan Prime – Northrop Grumman

# SDD Phase Program Plan

[illegible][illegible][illegible][illegible]

**A single Program Plan used to develop one or more Contract Plans**

**Contract Plans  
spawn  
Subcontract Plans  
as required**

Additional SDD Contract  
Plans *as required*

[illegible]





## Contents – Metadata (Items 1-9)

DD FORM 1004 (Rev. 1-61)									
1. PROGRAM									
2. POINT OF CONTACT (POC) INFORMATION									
3. REPORT FREQUENCY									
<p>1. PROGRAM</p> <p>2. POINT OF CONTACT (POC) INFORMATION</p> <p>3. REPORT FREQUENCY</p>									
<p>4. WEAPON SYSTEM TYPE</p> <p>5. SUBMISSION TYPE</p> <p>6. DATE AS OF (MM/DD/YYYY)</p> <p>7. REPORT DATE (MM/DD/YYYY)</p>									
<p>8. TELEPHONE NUMBER</p> <p>9. FAX NUMBER</p> <p>10. E-MAIL ADDRESS</p> <p>11. PREPARING ORGANIZATION</p> <p>12. REVIEW AND REFERENCE NUMBER</p>									
<p>13. WBS ELEMENT CODE</p> <p>14. WBS REPORTING ELEMENTS</p> <p>15. CONTRACT (DUNS CODE)</p> <p>16. CONTRACT NUMBER</p> <p>17. DD 1392</p> <p>18. DD 1392-1 (Rev. 1)</p> <p>19. DD 1392-1 (Rev. 2)</p> <p>20. DD 2630</p>									
<p>21. DD 1392-1 (Rev. 1)</p> <p>22. DD 1392-1 (Rev. 2)</p> <p>23. DD 2630</p>									

## Front page

- 1a. Program
- 1b. Milestone
- 2a. Weapon System Type
3. Submission Type (Initial or Change)
4. Date As Of
5. Report Date
6. POC Information
7. WBS Type (Program or Contract)
8. Preparing Organization
9. Review and Reference Number



# CSDR Plans

## Contents – WBS

[illegible]

## Front page

- The WBS is a **product-oriented** family tree composed of hardware, software, services, data and facilities
- Program Plan WBS reflects MIL-HDBK-881A
- Contract Plan WBS is specific to contract efforts
- Additional pages used for lengthy WBS



# Plans WBS Relationship

## IAEWSS Program Example

### Program Plan WBS

10. WBS ELEMENT CODE		11. WBS
a. PROGRAM	b. CONTRACT	REPORTING ELEMENTS
1.0		Integrated Airborne Electronic Warfare Sensor Suite (IAEWSS)
1.1		Prime Mission Product (PMP)
1.1.1		EO/IR Subsystem
1.1.2		Synthetic Aperture Radar (SAR)
1.1.3		PMP Applications Software
1.1.4		PMP System Software
1.1.5		Integration, Assembly, Test and Checkout
1.2		Platform Integration
1.3		Systems Engineering/Program Management
1.4		System Test and Evaluation
1.5		Training
1.6		Data
1.7		Peculiar Support Equipment
1.8		Common Support Equipment
1.9		Operational/Site Activation
1.10		Industrial Facilities
1.11		Initial Spares and Repair Parts

### Contract Plan WBS

10. WBS ELEMENT CODE		11. WBS
a. PROGRAM	b. CONTRACT	REPORTING ELEMENTS
1.0	1.0	Integrated Airborne Electronic Warfare Sensor Suite (IAEWSS)
1.1	1.1	Prime Mission Product (PMP)
1.1.1	1.1.1	EO/IR Subsystem
1.1.1	1.1.1.1	OPTICS
1.1.1	1.1.1.2	CCD/TV CAMERA
1.1.1	1.1.1.3	DIGITAL RECORDING DEVICE
1.1.1	1.1.1.4	FOCAL PLANE ARRAY
1.1.1	1.1.1.5	ANALOG ELECTRONICS
1.1.1	1.1.1.6	DIGITAL ELECTRONICS
1.1.1	1.1.1.7	CRYOGENICS
1.1.1	1.1.1.8	GIMBAL
1.1.1	1.1.1.9	POWER SUPPLY
1.1.1	1.1.1.10	CONTROLS & DISPLAYS
1.1.1	1.1.1.11	HOUSING
1.1.1	1.1.1.12	INTEGRATION, ASSEMBLY, & CHECKOUT
1.1.2	1.1.2	Synthetic Aperture Radar (SAR)
1.1.3	1.1.3	PMP Applications Software
1.1.3	1.1.3.1	CSCI #1- Display Generator Set
1.1.3	1.1.3.2	CSCI #2- EO/IR Mission Equipment Package
1.1.3	1.1.3.3	CSCI #3- Memory Storage Unit
1.1.4	1.1.4	PMP System Software
1.1.4	1.1.4.1	CSCI #1- Sys Input/Output Proc Cntrl Software
1.1.4	1.1.4.2	CSCI #2- Applications & Sys Services Proc
1.1.4	1.1.4.3	CSCI #3- Aircraft System Management
1.1.5	1.1.5	Integration, Assembly, Test and Checkout
1.2	1.2	Platform Integration
1.3	1.3	Systems Engineering/Program Management

*Contract Plan WBS offers an expansion and detail to Program Plan WBS elements under contract*



# Plans WBS Relationship

## Prime Contract Plan WBS

10. WBS ELEMENT CODE		11. WBS
a. PROGRAM	b. CONTRACT	REPORTING ELEMENTS
1.0	1.0	Integrated Airborne Electronic Warfare Sensor Suite (IAEWSS)
1.1	1.1	Prime Mission Product (PMP)
1.1.1	1.1.1	EO/IR Subsystem
1.1.1	1.1.1.1	OPTICS
1.1.1	1.1.1.2	CCD/TV CAMERA
1.1.1	1.1.1.3	DIGITAL RECORDING DEVICE
1.1.1	1.1.1.4	FOCAL PLANE ARRAY
1.1.1	1.1.1.5	ANALOG ELECTRONICS
1.1.1	1.1.1.6	DIGITAL ELECTRONICS
1.1.1	1.1.1.7	CRYOGENICS
1.1.1	1.1.1.8	GIMBAL
1.1.1	1.1.1.9	POWER SUPPLY
1.1.1	1.1.1.10	CONTROLS & DISPLAYS
1.1.1	1.1.1.11	HOUSING
1.1.1	1.1.1.12	INTEGRATION, ASSEMBLY, & CHECKOUT
1.1.2	1.1.2	Synthetic Aperture Radar (SAR)
1.1.3	1.1.3	PMP Applications Software
1.1.3	1.1.3.1	CSCI #1- Display Generator Set
1.1.3	1.1.3.2	CSCI #2- EO/IR Mission Equipment Package
1.1.3	1.1.3.3	CSCI #3- Memory Storage Unit
1.1.4	1.1.4	PMP System Software
1.1.4	1.1.4.1	CSCI #1- Sys Input/Output Proc Cntrl Software
1.1.4	1.1.4.2	CSCI #2- Applications & Sys Services Proc
1.1.4	1.1.4.3	CSCI #3- Aircraft System Management
1.1.5	1.1.5	Integration, Assembly, Test and Checkout
1.2	1.2	Platform Integration
1.3	1.3	Systems Engineering/Program Management

## Contractor Internal WBS

Material Procurement

Focal Plane Array Design

Focal Plane Array Planning

Focal Plane Array Integration

Focal Plane Array Assembly Labor

Focal Plane Array Quality

*Contract Plan WBS may not exactly match the Contractor's Internal WBS*

*Mapping may be required*





# Contractor Cost Data Report (CCDR) Types

## 1921

### Cost Data Summary Report

- Displays ALL applicable WBS elements
- Recurring & Nonrecurring costs for each WBS
- Contract totals
- UB, MR, G&A, and Fee

## 1921-1 Part 1

### Functional Cost- Hour Report

- Select WBS elements
- Recurring & Nonrecurring
- Detailed breakout of all resource data
  - Labor hours
  - Labor dollars
  - Material dollars
  - Overhead dollars
- Reporting by all Functions
  - Engineering
  - Tooling
  - Quality Control
  - Manufacturing

## 1921-1 Part 2

### Progress Curve Report

- Select WBS elements
  - *suggest* Cost drivers
- Recurring only
- Detailed breakout of select resource data
  - Labor hours
  - Labor dollars
  - Material dollars
- Two Functions
  - Quality Control
  - Manufacturing
- Unit-by-Unit or Lot-by-lot



# Software Resource Data Report (SRDR) Types

## 2630-1

### Initial Government Report

- Select WBS elements
- Displays government's initial **estimate** of software size, effort, and schedule

## 2630-2

### Initial Developer Report

- Select WBS elements
- Displays developer's initial **estimate** of software size, effort, and schedule

## 2630-3

### Final Developer Report

- Select WBS elements
- Displays developer's **actual** software size, effort, and schedule

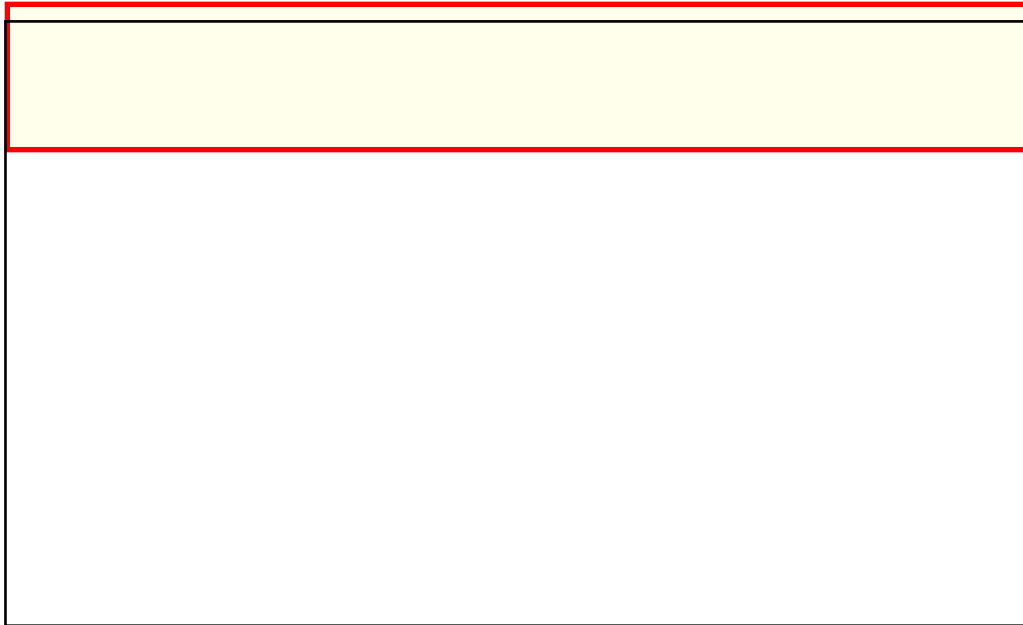


# Program Plans Exhibits – Back Page

15 CCDR SUBMISSION				
15a. SUBMISSION	15B. FORM	15C. EVENT	15D. AS OF DATE	15E. DUE DATE
<p style="text-align: center;"><b>PROGRAM OVERVIEW AND CONTRACTING APPROACH</b></p> <p>1. Program Overview:</p> <p>2. Contracting Approach:</p> <p>3. Quantity Overview:</p>				
<p style="text-align: center;"><b>REMARKS</b></p>				

# CSDR Plans

## Contents – Submission Frequency



- Program Plans list a compilation of all contract and subcontract submittals
  - Submission numbers
  - Report types
  - Events (driving need)
  - (Report data) As Of Dates
  - (Report) Due Dates
- Specific (estimated) dates identified for applicable contracts
  - cost reports
  - software reports

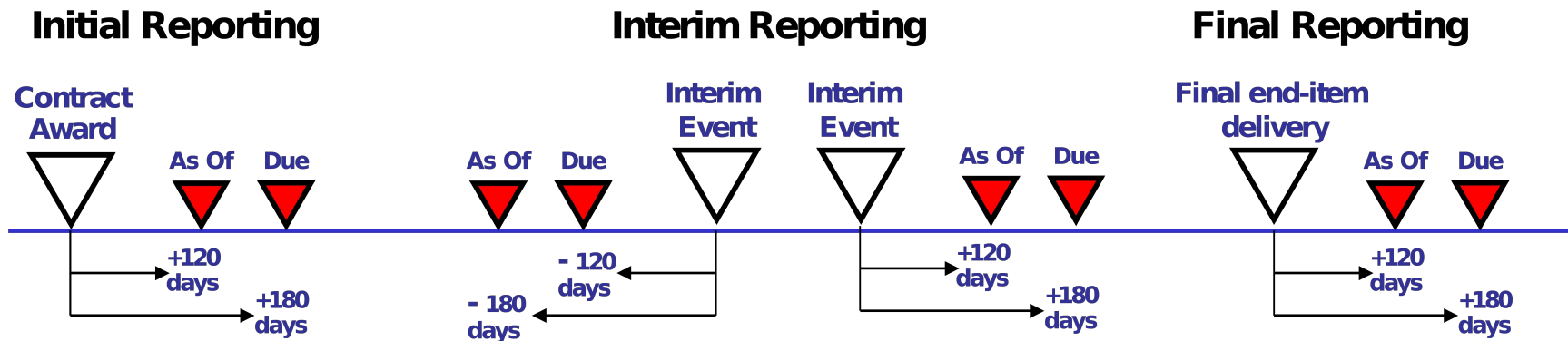
*Notify DCARC of event date change*





# CSDR Plans

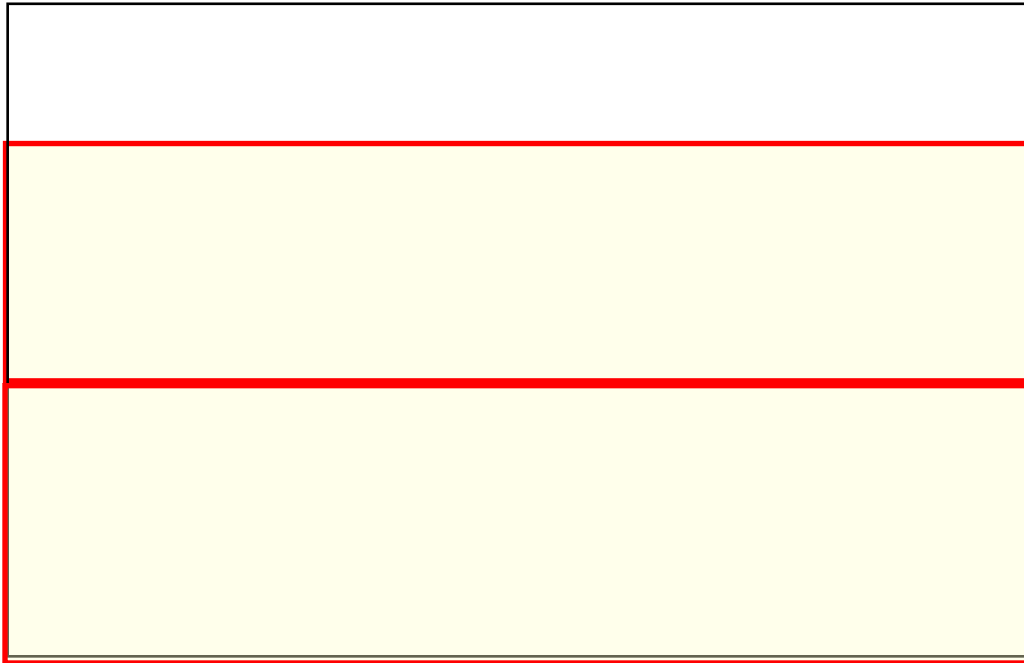
## Contents - Submission Frequency





# CSDR Plans

## Contents - Special End Notes



### Standard

- Program Overview
- Contracting Approach
- Quantity Overview

### By Exception:

- Unique/Supplemental Program Office Responsibilities
- Unique/Supplemental Contractor Instructions

# Revisions to CSDR Plans

- CSDR Program Plans and Contract Plans are “living documents” and should be updated as required
  - For example, development design matures and WBS changes
  - Program restructure
  - Changes typically required
    - Yet Programs have a weak record of maintaining CSDR Plans
- CSDR Plan Updates proceed via the same manner as Plan Development
  - PM has primary responsibility
  - CWIPT provides support
  - DCARC conducts review
  - CAIG Chairman gives approval

# CSDR Plans

## Supporting Documents

- Cost Analysis Requirements Description (CARD)
  - Produced by PM
  - Document intended to “establish, as a basis for cost-estimating, a description of the salient features of the program and of the system being acquired”
  - Select chapters and sections include:

1.1.1 System Description	7.0 System Milestone Schedule
1.1.3 System Configuration	8.0 Acquisition Plan
1.1.4 GFE	12.0 CSDR Plan
1.2 System Characteristics	
1.2.2 Software Description	



# CSDR Plans

## Supporting Documents

- Acquisition Strategy Document
  - Produced by PM
  - Provides description of program execution including business strategy and contracting approach
- Resource Distribution Table (RDT)
  - Produced by PM
  - Table showing contracts, subcontracts, and GFE
  - Used to help scope those contracts that may require CSDR Plans
- Project Applicability Matrix (PAM)
  - Produced by PM
  - Used on programs that include spiral/evolutionary efforts
  - Table displaying the project name, description, and the related WBS elements



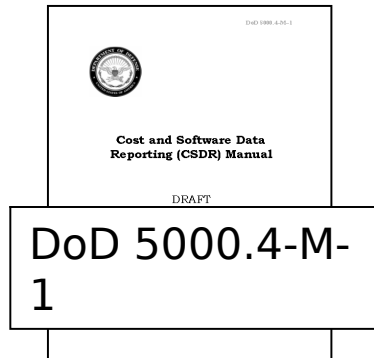
# Resource Distribution Table

				CFE				GFE	
				PRIME CONTRACT	SUB-CONTRACTS				CONTRACTS
Contractor				Northrop Grumman	Raytheon	Optics R US	Kodak	NA	NA
Address				Lithicum, MD	El Segundo, CA	Richmond, VA	Rochester, NY	NA	NA
Contract Number				tbd	TBD	TBD	TBD	NA	NA
Total Contract Value with Options (Est.) (TY\$M)				\$343.5	\$141.5	\$11.0	\$6.0	NA	NA
Responsibility				System Lead	SAR	Optics	CCD/TV Camera		
WBS Level									
L1	L2	L3	L4						
ELECTRONIC/AUTOMATED SOFTWARE SYSTEM				X					
	PRIME MISSION PRODUCT (PMP)			X					
		EO/IR SENSOR		X		X	X		
		SYNTHETIC APERTURE RADAR (SAR)			X				
		PMP APPLICATIONS SOFTWARE		X					
		PMP SYSTEM SOFTWARE		X					
		INTEGRATION, ASSEMBLY, TEST AND CHECKOUT		X					
	PLATFORM INTEGRATION			X					
	SYSTEMS ENGINEERING/PROGRAM MANAGEMENT			X					
	SYSTEM TEST AND EVALUATION			X					
	TRAINING			X					
	DATA			X					
	PECULIAR SUPPORT EQUIPMENT			X					
	COMMON SUPPORT EQUIPMENT			X					
	OPERATIONAL/SITE ACTIVATION			X					
	INDUSTRIAL FACILITIES			X					
	INITIAL SPARES AND REPAIR PARTS			X					

1. Used as a tool to help scope those contracts that may require Contract Plans
2. Table displaying the name and address of any prime contractors, subcontractors, and lower tier subcontractors that might meet the CCDR reporting thresholds mapped with the specific WBS elements for which they are responsible.
3. Include GFE
4. If a specific subcontractor is not yet known, enter "TBD"

# Who is responsible?

- C2.2.3 General Organizational Responsibilities



- *“DoD Program Managers (PMs) shall prepare and obtain approval for Program and Contract Cost and Software Data Reporting Plans, shall place approved CSDR Plan requirements on contract, and shall ensure that contractors comply with the CSDR contractual provisions.”*

***CSDR Plans are the  
responsibility of the  
Government***

# CSDR Plans

## Responsibilities By Organization

- **CAIG**

- Establish overall policy
- Approve program plans
- Authorize waivers
- Participate in the CWIPT

- **DCARC**

- Administer the CSDR system for ACAT ID and IC programs

- **Service Cost Centers**

- Participate in the CWIPT
- Review all ACAT IC and ID CSDR Plans

- **Government PM**

- Primary working level responsibility for the Program & Contract Plans

- **CWIPT**

- Identify cost analysis requirements (i.e., WBS, reports, and frequency) for programs and contracts, and advise the PM

- **Industry**

- No direct responsibility for Program Plan
  - (unless LRIP/Production and sole source)

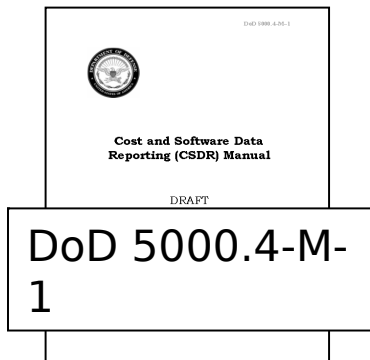
**ONLY THE CAIG CHAIRMAN HAS AUTHORITY TO APPROVE/WAIVE CSDR PLANS**



# Approval Process

- C2.4.4 Mandatory Policies

- *“For ACAT IC and ID programs, all Program and Contract CSDR Plans must be submitted to the DCARC for CAIG Chair approval. Program plans must be approved **before** issuing a solicitation to industry.”*



- C2.6.1.1 CAIG Responsibilities

- *“The CAIG Chair must approve all ACAT I Program and Contract CSDR Plans and any subsequent changes **before** issuing a solicitation to industry and awarding the contract, respectively.”*

- C2.6.3.1 DoD PM Responsibilities

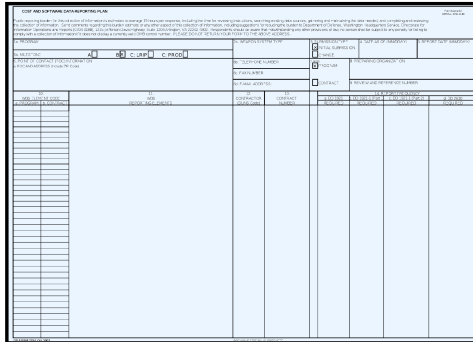
- *“The DoD PM, in coordination with the CWIPT, shall begin planning for CCDR reporting between 8 and 12 months **before** the Overarching Integrated Product Team (OIPT) Milestone B review.”*

# Outline

- Introduction
- CSDR Training
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - Cost Data Collection
    - Reporting Forms
    - Validation
  - Software Resource Data Reports

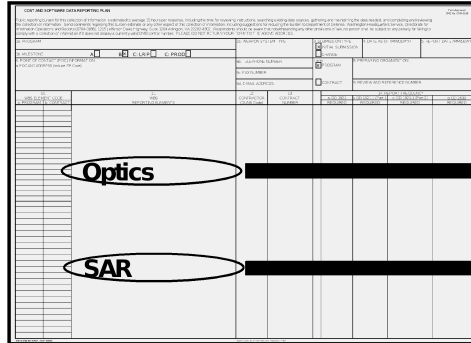
## Example Scenario (page 2 of 2)

### SDD Phase Program Plan



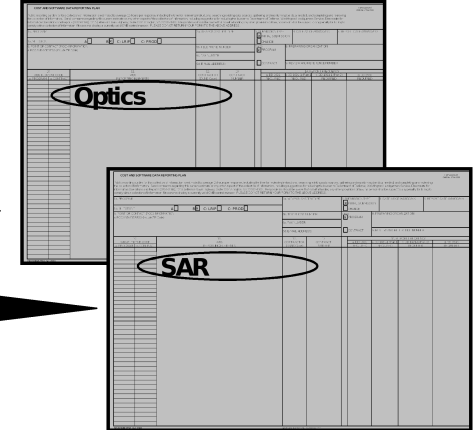
A screenshot of a 'SDD AND OPTICS CONTRACT PLAN' form. The form is divided into several sections, including 'GENERAL INFORMATION', 'SUBSYSTEMS', 'CONTRACT INFORMATION', and 'SCHEDULE'. It contains various fields for data entry, such as 'SUBSYSTEM NAME', 'CONTRACT NUMBER', and 'SCHEDULE'. The form is currently blank, with only the headers and labels visible.

### SDD Contract Plan Prime – Northrop Grumman



A screenshot of a 'SDD AND OPTICS CONTRACT PLAN' form for the Prime contractor, Northrop Grumman. The form is filled with data, including 'SUBSYSTEM NAME', 'CONTRACT NUMBER', and 'SCHEDULE'. Two specific items are highlighted with ovals and labeled: 'Optics' and 'SAR'.

### SDD Subcontract Plans

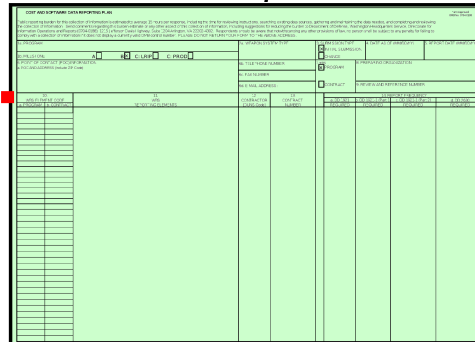


Two screenshots of 'SDD AND OPTICS CONTRACT PLAN' forms for subcontractors. The top form is labeled 'Optics' and the bottom form is labeled 'SAR'. Both forms are filled with data, including 'SUBSYSTEM NAME', 'CONTRACT NUMBER', and 'SCHEDULE'.

***A single Program Plan  
used to develop one or  
more Contract Plans***

***Contract Plans spawn  
Subcontract Plans as  
required***

### Additional SDD Contract Plans *as required*



A screenshot of an additional 'SDD AND OPTICS CONTRACT PLAN' form, colored green. It is filled with data, including 'SUBSYSTEM NAME', 'CONTRACT NUMBER', and 'SCHEDULE'.

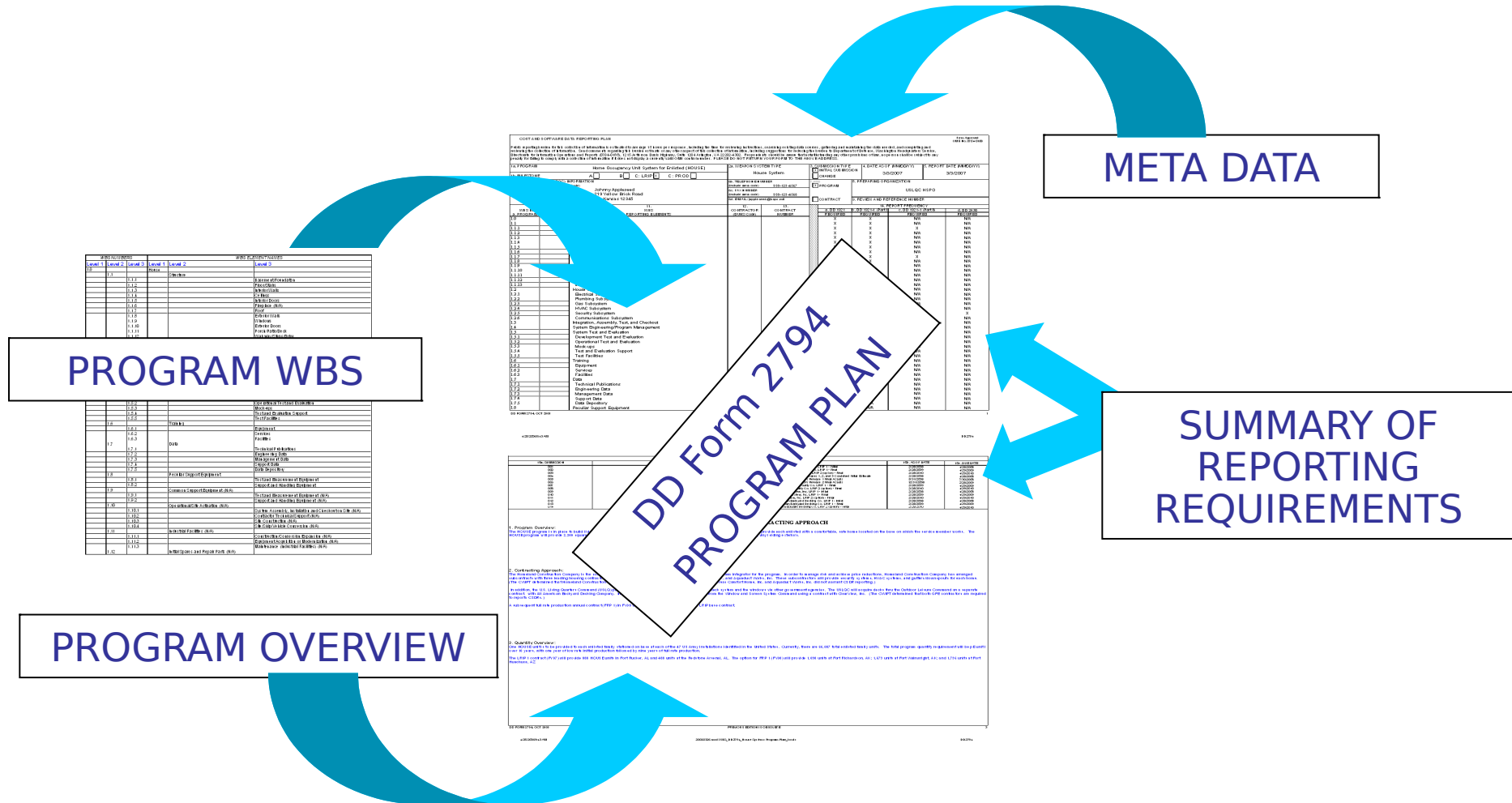


# Program Plans Purpose

- Provides a dynamic master summary set of reporting elements from which detailed Contract Plans and reports are developed
- Government PM is responsible for preparation
  - Support provided by CWIPT
- Cost data and software resources **are not** reported per the Program Plan
  - There are NO “Program Cost Data Reports”
- Cost data and software resources **are** reported per the Contract Plans
  - Contractors generate “Contractor Cost Data Reports” and “Software Resources Data Reports”



# Program Plan Components



# Program Plans

## Contents – WBS

- Program Plan WBS reflects MIL-HDBK-881A WBS Level 3
  - Expansion allowed
    - Accommodate product definition of reporting subcontracts
    - Provide visibility to high-risk or high-technical-interest elements
- Linkage to CARD
  - Ref. Chapter 1 Guidelines, Sections 1.1.3 and 12.0 of CARD
- Standardized information offers consistency and uniformity in definition



# Program Plans

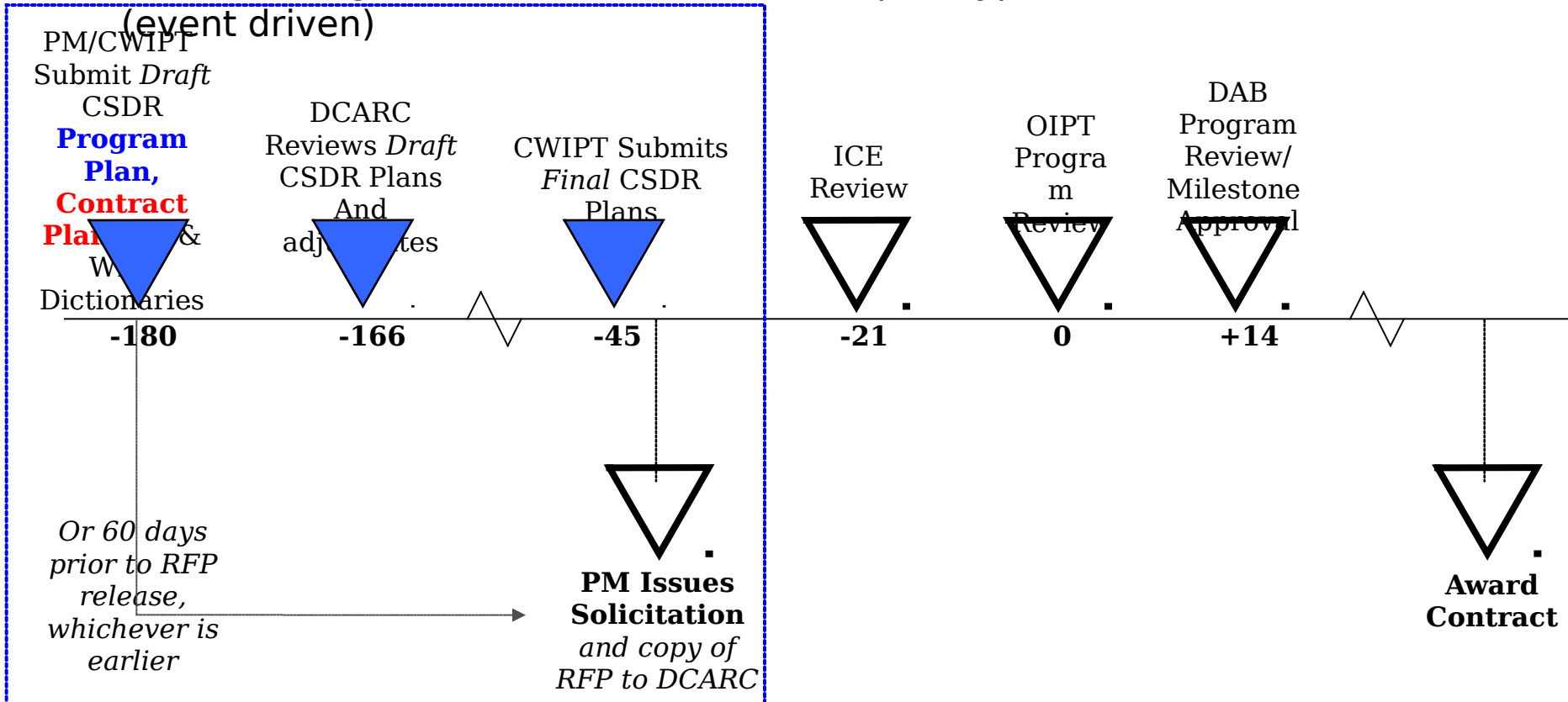
## Content – Electronic/Automated Software System WBS

Level 1	Level 2	Level 3
Electronic/Automated Software System	Prime Mission Product (PMP)	Subsystem 1..n (Specify Names)
		PMP Applications Software
		PMP System Software
		Integration, Assembly, Test and Checkout
	Platform Integration	Systems Engineering/Program Management
		System Test and Evaluation
		Training
		Data
		Peculiar Support Equipment
		Common Support Equipment
		Operational/Site Activation
		Industrial Facilities
		Initial Spares and Repair Parts

# Program Plans Preparation Timeline

- 8 -12 months before OIPT/Milestone/Contract Award, PM convenes CWIPT

- Create Program Plan WBS, determine report types & submission dates (event driven)

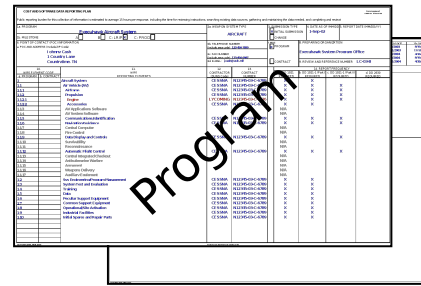




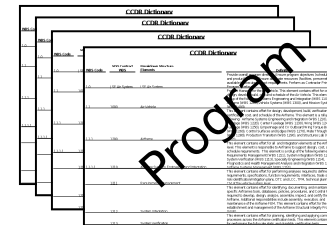
# Program WBS Dictionary

- Government program managers shall maintain and update the Program WBS Dictionary throughout the life of the program
  - Updates submitted with proposed plan changes
  - Dictionary WBS must match approved CSDR Plan WBS

# CSDR Program Plan



Project Name	Project Manager	Project Start	Project End	Project Status	Project Budget	Project Risk	Project Priority
Project A	John Doe	2000-01-01	2000-01-31	Completed	\$100,000	Low	High
Project B	Jane Smith	2000-02-01	2000-02-28	In Progress	\$200,000	Medium	Medium
Project C	Bob Johnson	2000-03-01	2000-03-31	Not Started	\$150,000	Low	Low



Project Name	Project Manager	Project Start	Project End	Project Status	Project Budget	Project Risk	Project Priority
Project A	John Doe	2000-01-01	2000-01-31	Completed	\$100,000	Low	High
Project B	Jane Smith	2000-02-01	2000-02-28	In Progress	\$200,000	Medium	Medium
Project C	Bob Johnson	2000-03-01	2000-03-31	Not Started	\$150,000	Low	Low

OFFICE OF THE SECRETARY OF DEFENSE  
August 11, 2000

MEMORANDUM FOR: Richard P. Drake  
THREAT: Carl Olson  
FROM: Steve Miller

Subject: Cooperation Engagement Capability (CEC) Open Architecture Framework (CAF) - Common CSDR Plan

1. Attached is the Cooperation Engagement Capability (CEC) Open Architecture Framework (CAF) - Common CSDR Plan, NGA-01-01 for the Production Phase.

2. As of August 11, 2000, the CEC program is in the Production Phase with three active contracts: NGA-01-01, NGA-01-02, and NGA-01-03. The CEC Program was established by the Joint Staff JCS in May 1999.

3. A number of issues have been resolved since the previous JCS memorandum. The DCARC had extensive discussions with the program office regarding the steps that needed to be taken to gain CSDR compliance. On July 21, 2000, you approved a Program Plan (PP) and two contract plans (CP) for CSDR NGA-01-01, NGA-01-02, and NGA-01-03. All subsequent reports have been submitted and through a series of discussions, the contractor, the program office, and the DCARC have agreed to accept the program plan.

**= CSDR PROGRAM PLANNING PACKAGE**

# Program Plan

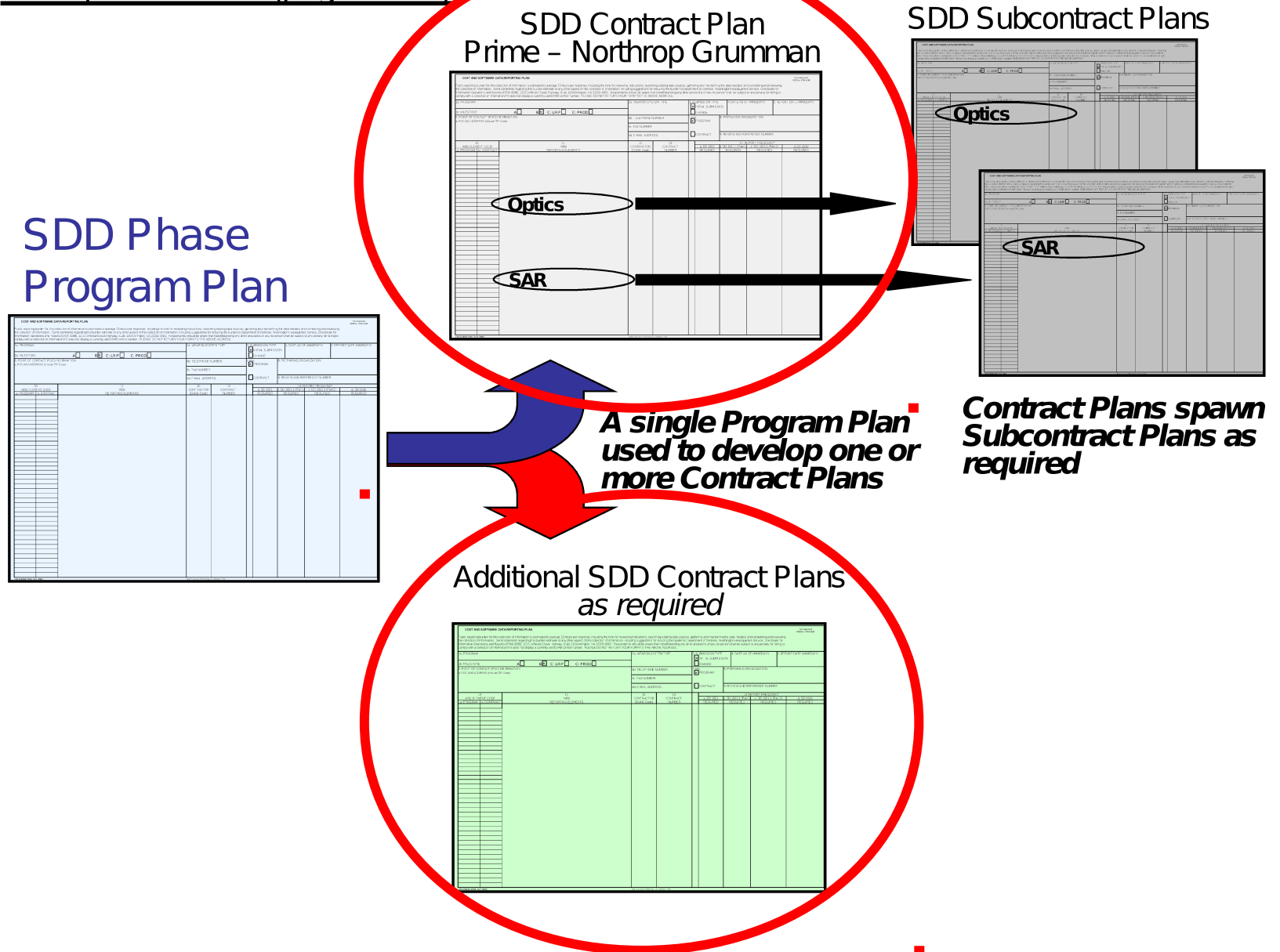
- Program Plan Example (E1)



# Outline

- Introduction
- CSDR Training
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - Cost Data Collection
    - Reporting Forms
    - Validation
  - Software Resource Data Reports

## Example Scenario (page 2 of 2)



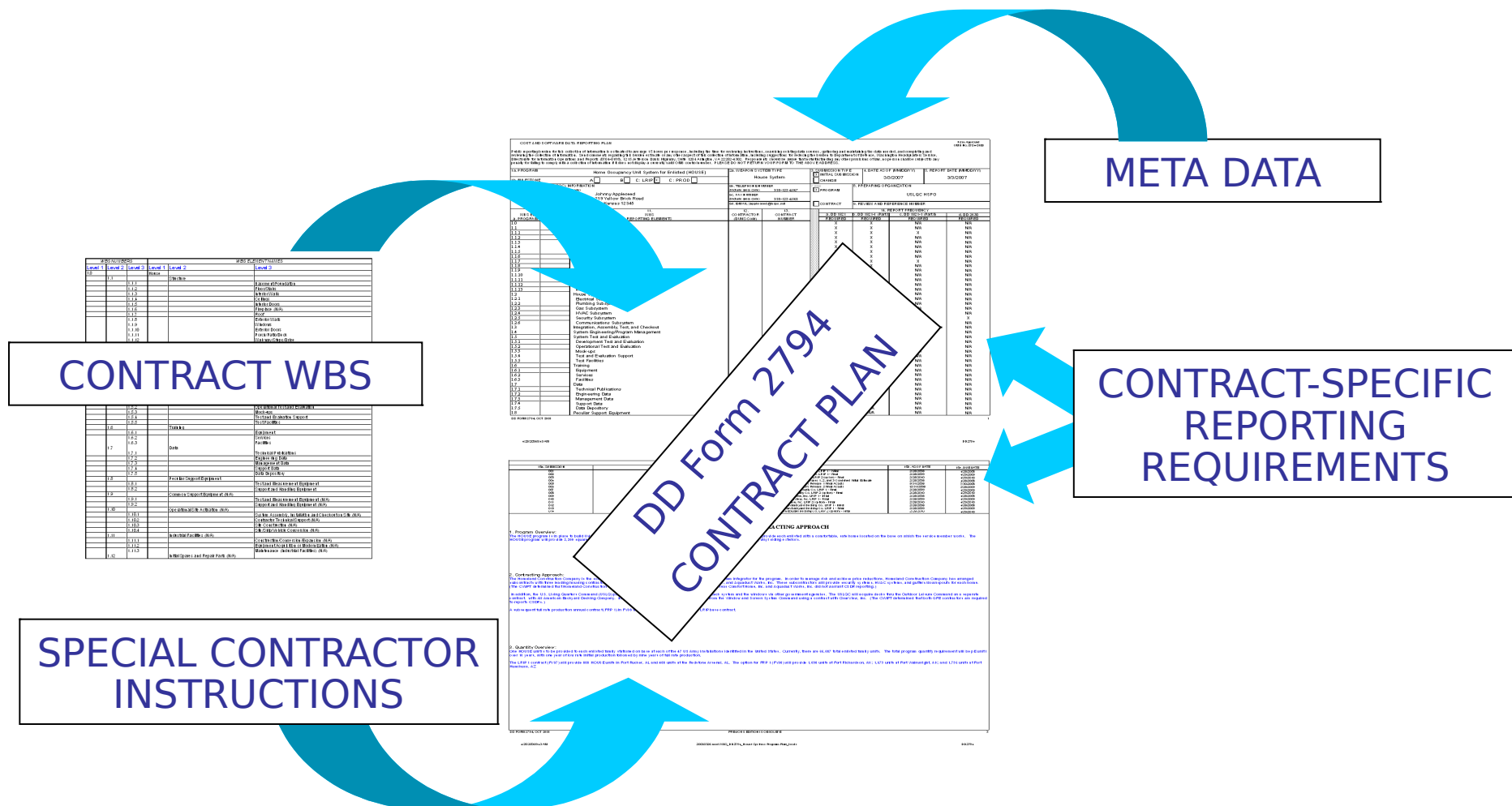
# Contract Plans

## Purpose

- The contract plan covers an individual contract or subcontract within a program
  - Whereas the program plan covers the entire program
  - Government PM is responsible for preparation
    - Support provided by CWIPT and contractor
- Contract Plan reflects the proposed collection of cost and software data by reporting elements, report type, and frequency of reporting



# Contract Plan Components



# Contract Plans

## Content - WBS

- Define the WBS level of reporting to use the fewest number of elements consistent with the anticipated use of the data in cost estimation
- Detailed reporting required for lower level elements that address high-risk, high-value or high-technical-interest areas of the program
- Extensions to Contract Plan WBS can be tailored to the specific program, but will be consistent and tractable with the Program Plan WBS and MIL-HDBK-881A





# Contract Plans

## Exhibits – Summary Reporting Elements

10. WBS ELEMENT CODE		11. WBS REPORTING ELEMENTS	12. CONTRACTOR (DUNS Code)	13. CONTRACT NUMBER	14. REPORT FREQUENCY			
a. PROGRAM	b. CONTRACT				a. DD 1921 REQUIRED	DD 1921-1 (Part 1) REQUIRED	c. DD 1921-1 (Part 2) REQUIRED	d. DD 2630 REQUIRED
		<b>TOTAL COST (LESS REPORTING CONTRACTOR'S G&amp;A &amp; PROFIT OR FEE)</b>			x			
		REPORTING CONTRACTOR'S G&A			x			
		OTHER REPORTING CONTRACTOR'S MISCELLANEOUS			x			
		REPORTING CONTRACTOR UNDISTRIBUTED BUDGET			x			
		REPORTING CONTRACTOR MANAGEMENT RESERVE						
		REPORTING CONTRACTOR FCCM						
		TOTAL COST (LESS REPORTING CONTRACTOR'S PROFIT OR FEE)						
		REPORTING CONTRACTOR PROFIT OR FEE						
		<b>TOTAL COST (THROUGH REPORTING CONTRACTOR'S G&amp;A &amp; PROFIT O</b>						

**CONTRACTOR**  
G&A, Misc, UB, MR, FCCM, Profit/Fee  
“standard summary reporting elements”

**1921 Bottom Line** = “Total Cost Through Reporting Contractor’s G&A and Profit or Fee”

*Summary Reporting Elements as prescribed in DID*



# CSDR Plans

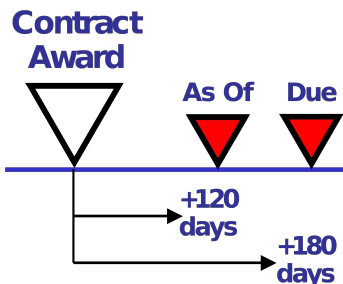
## Contents – Submission Frequency

15. CSDR SUBMISSION				
15a. SUBMISSION	15b. FORM	15c. EVENT	15d. AS OF DATE	15e. DUE DATE
REMARKS				

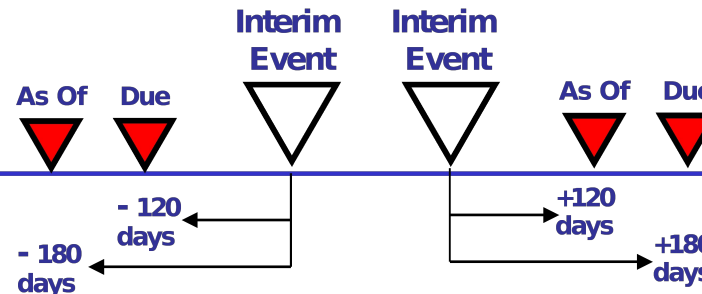
DD FORM 1295, Oct 2001 PREVIOUS EDITIONS OBSOLETE

- Initial reports due within 180 Days after contract award to ensure ability to report consistent with CSDR Plan and CDRLs
- Development Efforts
  - Reports are to be delivered before major milestones or decision points, as well as at the end of the effort
- Production Programs
  - One report after each fiscal year buy
  - Typically request interim LRIP reports in prep for FRP
  - Given CAIG approval, CWIPT can request interim reports

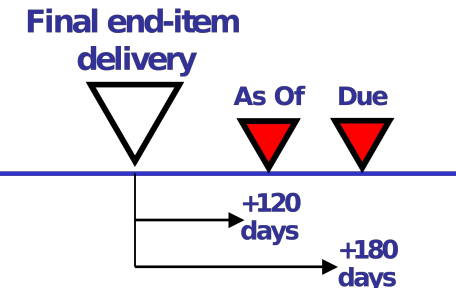
### Initial Reporting



### Interim Reporting



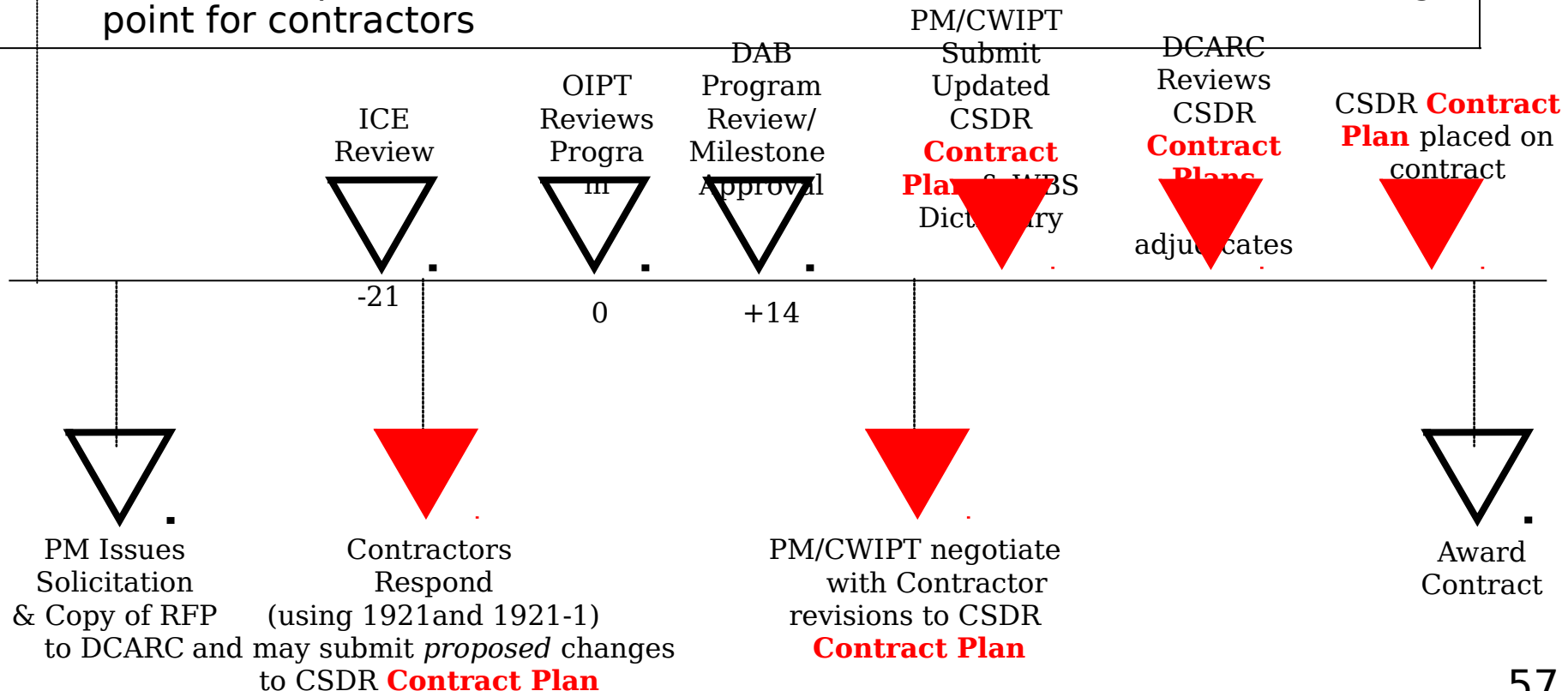
### Final Reporting



# Contract Plans Preparation Timeline

CSDR **Contract Planning** process *starts with* the **Program Plan** development

- Prior to RFP, the **Program Plan** WBS is expanded and tailored for *expected* efforts
- RFP includes expanded WBS and *Draft* Contract Plan to be used as a starting point for contractors





# Contract WBS Dictionary

- Reporting contractor shall maintain and update the CWBS Dictionary throughout the life of the contract
  - WBS definitions map directly (one-for-one) to the approved Contract CSDR Plan WBS
  - The dictionary shall not be submitted more frequently than report submissions

[illegible]

**C++ ID-Card**

Name: \_\_\_\_\_

ID Number: \_\_\_\_\_

Date: \_\_\_\_\_

**Program**

OFFICE OF THE SECRETARY OF DEFENSE August 11, 2004

MEMO FOR: Robert F. Burke  
Through: Gary Miller  
Steve Miller

SUBJECT: Cooperative Enterprise Capability (CECE) Capabilities  
Architecture  
Track Manager (OASD-B) Contract Structure

Attached to the Cooperative Enterprise Capability (CECE) Capabilities Track Manager (OASD-B) Contract Structure is N-043 (C) for the Production Phase.

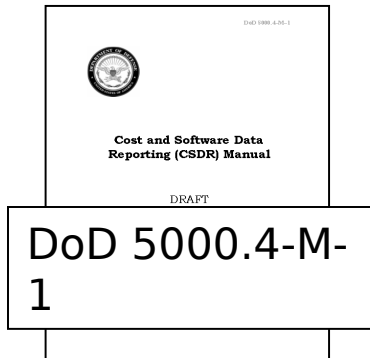
As of August 11, 2004, the CECE program is in production phase with three active contracts: N00003-CR-000004-CO-5504, and N00003-CO-5518. The CECE Production Yellow Line in the DAU's assessment to May 2003 was:

A number of issues have been resolved since the previous DAU's assessment. The CECE's had extensive discussions with the program office regarding the steps that needed to be taken to get CECE's completed. On July 23, 2004 you agreed Program Plan (N-043) and two contract plans (N-043 C.6.1 & C.2) with the CECE production contractor. All of the issues have been identified and through a series of discussions among the contractor, the program office, and the DCASST program have been accepted.

- + Program WBS Dictionary**
- + RDT**  
**(and PAM if applicable)**
- + DCARC Transmittal Letter**

# Contract Types

- C2.5.2.4



- *“All contract types require CCDR reporting.*
  - *However, the PM may request a waiver for selected FFP contracts that were competitively awarded as long as competitive conditions continue to exist.”*

This provision is applicable to all ACAT 1C, 1D, II, and III programs with CCDR requirements.



Waiver Approval:

ACAT 1C and 1D Programs: CAIG Chair

ACAT II and III Programs: Designated Service Representative

# Contract Plans

## "Ideal World" vs. "Real World"

- Typical reporting per contract
- Special cases in which reporting may not be singular per contract
  - Per Variant
  - Per CLIN
  - Per Delivery Order
  - Per Spiral

*Engage Contracting Officer Early*

# CSDR impact upon Subcontractors

- Two types of Subcontractors
  - Those that **don't** meet the reporting dollar threshold
  - Those that **do** meet the reporting dollar threshold
    - Requirements are “flowed-down” by the Prime contractor



# Direct Reporting Subcontract Requirements

- Prime is responsible for incorporating requirements into affected subcontracts
  - CSDR Plans
    - A separate CSDR Contract Plan shall be prepared for subcontracts that exceed the \$50M reporting threshold (FY 2002 constant dollars.)
    - May be required on high-risk or high-technical-interest contracts between \$7M-\$50M (FY2002 constant dollars)
  - CSDR Reports
    - Subcontractors required to report directly to DCARC

# Direct Reporting Subcontract Requirements

- Conceptually, in a most simple example, each subcontract WBS starts with a single row from the prime contractor WBS.
  - WBS detail is expanded in the subcontractor's CSDR plan
  - No need to reflect detail of subcontractor WBS in Prime Contractor WBS

## Prime

Program	Prime Contractor WBS scheme	
1	1.0	Cruise Missile System
1.1	1.1	Air Vehicle (AV)
1.1.1	1.1.1	Propulsion
1.1.1.2	1.1.1.1	Engine
1.1.1.3	1.1.1.2	Integration, Assembly, & Test
1.1.2	1.1.2	Payload
1.1.2	1.1.2.1	Warhead Load
1.1.2	1.1.2.2	Target Detection Device
1.1.2	1.1.2.3	Fuze
1.1.2	1.1.2.4	Integration, Assembly, & Test
1.1.3	1.1.3	Airframe
1.1.6	1.1.4	Guidance and Control
1.1.6	1.1.4.1	Missile Control Computer
1.1.6	1.1.4.2	Satellite Data Link (SDL)
1.1.6	1.1.4.3	Global Positioning System (GPS)
1.1.6	1.1.4.4	SDL/GPS Antennae
1.1.6	1.1.4.5	Digital Scene Matching Area Correlator

## Subcontractor

Program	Subcontractor WBS scheme	
1.1.1.2	1.0	F107-WR-402 TURBOFAN ENGINE SYSTEM
1.1.1.2	1.1	Engine Prime Mission Product (PMP)
1.1.1.2	1.1.1	Intake
1.1.1.2	1.1.2	Fan
1.1.1.2	1.1.3	Compressor
1.1.1.2	1.1.4	Combustor
1.1.1.2	1.1.5	HP Turbine
1.1.1.2	1.1.6	Nozzle
1.1.1.2	1.1.7	Engine Applications Software
1.1.1.2	1.1.8	Engine System Software
1.1.1.2	1.1.9	Integration, Assembly, Test and Checkout
1.1.1.2	1.2	Platform Integration
1.1.1.2	1.3	Systems Engineering/Program Management
1.1.1.2	1.4	System Test and Evaluation
1.1.1.2	1.4.1	Development Test and Evaluation
1.1.1.2	1.4.2	Operational Test and Evaluation
1.1.1.2	1.4.3	Mock-ups
1.1.1.2	1.4.4	Test and Evaluation Support
1.1.1.2	1.4.5	Test Facilities

Etc...

Etc...



# Treatment of GFE

- PM's for ACAT I MDAPS often procure end items from other government program offices and provide those items to the Prime as Government Furnished Equipment (GFE).
- Funds used to procure GFE by the ACAT I PM are under same CSDR requirements as funds used to procure CFE
  - (GFE) Contracts exceeding reporting thresholds are subject to CSDR reporting requirements
  - The ACAT I PM is responsible for developing the (GFE) CSDR Contract Plan and generating/delivering CDRLs in order to obtain CSDR data



# Contract WBS Dictionary

- Reporting contractor shall maintain and update the CWBS Dictionary throughout the life of the contract
  - WBS definitions map directly (one-for-one) to the approved Contract CSDR Plan WBS, NOT a dictionary of the accounting system cost accounts
  - The dictionary shall not be submitted more frequently than report submissions

# Note on CSDR Plans

## Delayed Plans Development is a Systemic Problem

- Before Contract Award
  - Using the CSDR manual, CARD, and the RDT you can plan the draft WBS, mapping, and cost rollup scheme with time to make adjustments
  - Acceptable (and expected) that plans are updated to accommodate changes
- **CONSEQUENCES OF DELAYED PLANNING:**
  - Large emphasis to move quickly and get something on contract
  - Limited time
    - Examine analogous program WBSs
    - Develop mapping schemes
  - Rushed CSDR effort tends to result in less than optimal plan
    - Yielding data that is less comparable (to other programs)
    - Deteriorated data collection quality impacts estimating efforts/results
  - Longer delays and contract mods tend to drive up data collection costs

# Questions / Discussion / Review

- **At this point, you should:**
  - *Understand the purpose of Contract Plans*
  - *Be familiar with DD Form 2794 and its data fields*
  - *Understand the relationship between the Program Plan, Prime Contract Plan(s), and Subcontract Plan(s)*
  - *Be able to prepare a Prime Contract Plan and Subcontract Plan given a description of the program, acquisition strategy, and schedule*

# Contract Plan

- Contract Plan Examples
  - Prime Contract Example (E2)
  - Subcontract Example (E3)



# Outline

- Introduction
- **CSDR Training**
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - **Cost Data Collection**
    - Reporting Forms
    - Validation
  - Software Resource Data Reports





# Cost Reporting Forms

## General Purpose

- Data fields reflect the types of information and level of detail required to best support cost analysis and cost estimating techniques used to build credible, defensible, reproducible cost estimates
- Forms used today are dated OCT 2003:
  - DD Form 1921, Cost Summary Data Report
  - DD Form 1921-1 Functional Cost-Hour and Progress Curve Report
    - DD Form 1921-1 (Front) provides Functional Cost-Hour data
    - DD Form 1921-1 (Back) provides Progress Curve data
- Older contracts are allowed to use forms consistent with generation of contract
- Ref. DIDs
- *As forms are occasionally modified by OSD to better accommodate data providers and users, we suggest that data providers check the OSD website to stay current at <http://dcarc.pae.osd.mil>*



# Cost Reporting Forms

## 1921

### Cost Data Summary Report

- Displays ALL applicable WBS elements
- Recurring & Nonrecurring costs for each WBS
- Contract totals
- UB, MR, G&A, and Fee

## 1921-1 Part 1

### Functional Cost- Hour Report

- Select WBS elements
- Recurring & Nonrecurring
- Detailed breakout of all resource data
  - Labor hours
  - Labor dollars
  - Material dollars
  - Overhead dollars
- Reporting by all Functions
  - Engineering
  - Tooling
  - Quality Control
  - Manufacturing

## 1921-1 Part 2

### Progress Curve Report

- Select WBS elements
  - *suggest* Cost drivers
- Recurring only
- Detailed breakout of select resource data
  - Labor hours
  - Labor dollars
  - Material dollars
- Two Functions
  - Quality Control
  - Manufacturing
- Unit-by-Unit or Lot-by-lot



# Cost Reporting Guidance

## DATA ITEM DESCRIPTION

**Title:** DD Form 1921, "Cost Data Summary Report"

**Number:** DI-FNCL-81565A

**AMSC Number:** D7514

**DTIC Applicable:**

**Preparing Activity:** (D) OSD/PA&E/CAIG

**Applicable Forms:** DD Form 1921 (OMB Control No. 0704-0188); 2 forms

**Approval Date:** 20031031

**Limitation:**

**GIDEP Applicable:**

**Use/Relationship:** DD Form 1921 is used to obtain essential cost data from contractors for the purpose of establishing a cost database. Prime contractors and integrating contractors for teaming arrangements with Contractor Cost Data Reporting (CCDR) requirements in their prime contracts are responsible for flowing down CCDR requirements to subcontractors and team contractors who meet the reporting thresholds for these requirements. All contractors must submit reports electronically to the Defense Cost and Resource Center (DCARC), where a database of CCDR data is maintained. The database is used to do the following: (1) prepare program cost estimates for major systems reviewed by the Defense Acquisition Board (DAB) and other Component review programs; (2) develop independent Government cost estimates in support of cost and price analyses; and (3) develop estimates to support Analyses of Alternatives (AOAs), Cost As an Independent Variable (CAIV), and long-range planning efforts.

Information acquired through DD Form 1921 includes actual and estimated incurred costs at completion and the number of units being procured by Work Breakdown Structure (WBS). Reporting typically includes level 3 of the contract and subcontract WBS and selected lower-level WBS elements that are high-risk, high-technical interest, or high-value items. Costs include both direct and overhead for each WBS element and are subdivided into recurring and nonrecurring costs. General and Administrative (G&A), undistributed budget, management reserve, facilities capital cost of money, and profit/loss or fee are shown separately at the bottom of the report and are not included in the individual WBS element costs.

DD Form 1921 reporting is mandatory on Acquisition Category (ACAT) IC and ID program contracts and on other contracts valued over \$50 million. Contracts priced between \$7 million and \$50 million are subject to CCDR requirements when the Cost Working-Level Integrated Product Team (CWIFT) determines, and the Cost Analysis Improvement Group (CAIG) agrees, that they are high-risk or high-technical-interest items. Contracts priced below \$7 million are not subject to CCDR requirements, even if they are ACAT IC and ID programs. Reporting frequency is tied to program estimating needs as determined by the Program Manager and the CWIFT and approved by the CAIG Chair for ACAT I programs.

This DID summarizes the format for DD Form 1921 and provides preparation instructions to support the specific data and frequency requirements specified in the contract. DD Form 1921 is related to the other CCDR form, DD Form 1921-1,

## DATA ITEM DESCRIPTION

**Title:** DD Form 1921-1 "Functional Cost-Hour and Progress Curve Report"

**Number:** DI-FNCL-81566A

**AMSC Number:** D7516

**DTIC Applicable:**

**Preparing Activity:** (D) OSD/PA&E/CAIG

**Applicable Forms:** DD Form 1921-1 (OMB Control No. 0704-0188); 2 forms

**Use/Relationship:** DD Form 1921-1 is used to obtain essential cost data from contractors for the purpose of establishing a cost database. Prime contractors and integrating contractors for teaming arrangements with Contractor Cost Data Reporting (CCDR) requirements in their prime contracts are responsible for flowing down CCDR requirements to subcontractors and team contractors who meet the reporting thresholds for these requirements. All contractors must submit reports electronically to the Defense Cost and Resource Center (DCARC), where a database of CCDR data is maintained. The database is used to do the following: (1) prepare program cost estimates for major systems reviewed by the Defense Acquisition Board (DAB) and other Component reviewed programs; (2) develop independent Government cost estimates in support of cost and price analyses, and (3) develop estimates to support Analyses of Alternatives (AOAs), Cost As an Independent Variable (CAIV), and long-range planning efforts. DD Form 1921-1 consists of two major parts: Part I, Functional Cost-Hour Report, and Part II, Progress Curve Report.

Part I, Functional Cost-Hour Report, displays actual costs by functional category (i.e., Engineering, Manufacturing, Quality Control, Tooling, and Other), each functional area is broken out by direct labor hours and cost category (e.g., Direct Labor, Material, Other Direct Costs, and Overhead). Part I data is further subdivided into recurring and nonrecurring costs. Part I data must also be submitted for the total contract and for selected WBS elements as identified by the Program Manager and the Cost Working-Level Integrated Product Team (CWIFT) process. The elements selected for reporting should be high-cost, high-risk, or high-technological-interest items.

Part II, Progress Curve Report, shows actual and estimated direct recurring costs at completion by unit lot for selected reporting elements. Part II data are required only on high-risk or high-quantity programs from Research and Development through the completion of low-rate initial production (LRIP) and the initial year of the Full-Rate Production buy. Additional years for Full-Rate Production buys can be added if needed for purposes of estimating costs. The CWIFT makes these determinations for approval by the Cost Analysis Improvement Group (CAIG) Chair. For purposes of estimating cost, the CWIFT is responsible for defining units and lots for its particular programs and contracts. Lot definition for reporting purposes should be agreed upon by the contractor and the DoD customer before reporting begins. Part II data also includes direct labor hours and costs for Quality Control and Manufacturing. Within these categories, costs are further subdivided by major cost category to include Manufacturing, Quality Control,



# Cost Reporting Forms

## DD Form 1921- "Cost Data Summary Report"

- Provides summary cost data for **all** contract WBS elements at the level specified in the CSDR Plan
- For each WBS element, includes both recurring and nonrecurring breakouts
  - TO DATE *and* AT COMPLETION
- Displays contract totals for UB, MR, G&A, and Fee
- Data Item Description (DID) DI-FNCL-81565A.





# Cost Reporting Forms

## Exhibit – Blank DD Form 1921

**Contractors -**

**Use the contract plan WBS to report your cost data on DD 1921**

**COST AND SOFTWARE DATA REPORTING PLAN**

Public reporting burden for this collection of information is estimated to average 15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204 Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provisions of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1a. PROGRAM: **Home Occupancy Unit System for Enlisted (HOUSE)**

2a. WEAPON SYSTEM TYPE: **Bicycle System**

3. SUBMISSION TYPE: ☒ INITIAL SUBMISSION ☐ CHANGE

4. DATE AS OF (MM/DD/YYYY): **3/3/2007**

5. REPORT DATE (MM/DD/YYYY): **3/3/2007**

1b. MILESTONE: **A** ☐ **B** ☐ **C: LRIP** ☒ **C: PROD** ☐

6. POINT OF CONTACT (POC) INFORMATION:  
a. POC AND ADDRESS (include ZIP Code): **1 John Appleseed  
219 Yellow Brick Road  
Oz, Kansas 12345**

6b. TELEPHONE NUMBER (include area code): **999-123-4567**

6c. FAX NUMBER (include area code): **999-123-4568**

6d. E-MAIL: **jappleseed@thpo.mil**

7. PREPARING ORGANIZATION: **USLQC HSPQ**

8. REVIEW AND REFERENCE NUMBER:

9. REPORT FREQUENCY:  
a. DD 1921: ☒ REQUIRED ☐ NOT REQUIRED  
b. DD 1921.1 (Part I): ☒ REQUIRED ☐ NOT REQUIRED  
c. DD 1921.1 (Part II): ☒ REQUIRED ☐ NOT REQUIRED  
d. DD 2630: ☒ REQUIRED ☐ NOT REQUIRED

10. WBS ELEMENT CODE	11. WBS REPORTING ELEMENTS	12. CONTRACTOR (DUNS Code)	13. CONTRACT NUMBER
1.0	Bicycle System		
1.1	Bicycle		
1.1.1	Frame		
1.1.2	Wheels		
1.1.3	Transmission Subsystem (Gears & Shifters)		
1.1.4	Steering		
1.1.5	Braking System		
1.1.6	Seat		
1.1.7	PMP Applications Software		
1.1.8	PMP System Software		
1.1.9	Integration, Assembly, Test and Checkout		
1.2	Platform Integration		
1.3	System Engineering/Program Management		
1.4	System Test and Evaluation		
1.4.1	Development Test and Evaluation		
1.4.2	Operational Test and Evaluation		
1.4.3	Mock-ups / System Integration Labs (SILs)		
1.4.4	Test and Evaluation Support		
1.4.5	Test Facilities		
1.5	Training		
1.5.1	Equipment		
1.5.2	Services		
1.5.3	Facilities		
1.6	Data		

### DD Form 2794 Contract Plan

**Program Office -**

**Use the contract plan WBS to obtain the cost data you want**

**DD Form 1921 Cost Data Summary Report**

1a. PROGRAM: **Home Occupancy Unit System for Enlisted (HOUSE)**

2. DOLLARS IN: **0**

3. TYPE ACTION: ☐ CONTRACT NO. ☐ TEST AMENDMENT ☐ SUPPLEMENT ☐ NO. ☐ BUDGET ESTIMATE ☐ SUBCONTRACTOR

4. CONTRACT TYPE: **CONTRACT PRICE ESTIMATE**

5. CONTRACT CEILING: **0**

6. CONTRACTOR TYPE: **PRIME/ASSOCIATE SUBCONTRACTOR**

7. NAME OF CUSTOMER: (Subcontractor use only)

8. NAME OF CUSTOMER: (Subcontractor use only)

CONTRACT LINE ITEM A	REPORTING ELEMENTS B	WBS ELEMENT CODE C	NUMBER OF UNITS D	COSTS INCURRED E			NUMBER OF UNITS F	COSTS INCURRED G		
				NONRECURRING H	RECURRING I	TOTAL J		NONRECURRING K	RECURRING L	TOTAL M
	Bicycle System	1.0								
	Bicycle	1.1								
	Frame	1.1.1								
	Wheels	1.1.2								
	Transmission Subsystem (Gears & Shifters)	1.1.3								
	Steering	1.1.4								
	Braking System	1.1.5								
	Seat	1.1.6								
	PMP Applications Software	1.1.7								
	PMP System Software	1.1.8								
	Integration, Assembly, Test and Checkout	1.1.9								
	Platform Integration	1.2								
	System Engineering/Program Management	1.3								
	System Test and Evaluation	1.4								
	Development Test and Evaluation	1.4.1								
	Operational Test and Evaluation	1.4.2								
	Mock-ups / System Integration Labs (SILs)	1.4.3								
	Test and Evaluation Support	1.4.4								
	Test Facilities	1.4.5								
	Training	1.5								
	Equipment	1.5.1								
	Services	1.5.2								
	Facilities	1.5.3								
	Data	1.6								

13. REMARKS:

14a. NAME (Last, First, Middle Initial):

14b. DEPARTMENT:

14c. TELEPHONE NO. (include Area Code):

14d. E-MAIL ADDRESS:

14e. FAX NO. (include Area Code):

14f. SIGNATURE:

14g. DATE (Signed (MM/DD/YYYY)):

### DD Form 1921 Cost Data Summary Report



# Cost Reporting Forms

## Exhibit – Blank DD Form 1921

## Item 6, Multi-year Contract

- If “No”, enter the specific fiscal year funding the contract in the “Remarks” section (item 13).
- For incrementally funded (R&D) contract, check “Yes” and enter all the fiscal years covered by the contract in the “Remarks” section.

Form Approved  
OMB No. 0704-0188

4. APPROPRIATION <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT	5. REPORT AS OF (MM/DD/YY) <div style="border: 2px solid red; border-radius: 50%; width: 100px; height: 100px; margin: 10px auto;"></div>
6. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO	7. FY FUNDED:

Code) 12. NAME OF CUSTOMER: (Subcontractor Use Only)

AT COMPLETION			
NUMBER OF UNITS H	COSTS INCURRED		TOTAL K
	NONRECURRING I	RECURRING J	

Year for which data are reported contains year, show the 7 and all other years section

CCDR contract unique will enable an analyst to a from this form.

SIGNATURE
14a. DATE SIGNED (MM/DD/YY)

## Item 7, FY Funded

- Enter the fiscal year for which data are being reported.
- If the contract being reported contains more than one fiscal year, show the current year in item 7 and all other years in the “Remarks” section
  - As well as other CCDR contract unique information that will enable an analyst to better use the data from this form.





# Cost Reporting Forms

# Exhibit - Blank DD Form 1921

[illegible]

These fields provide cost data for each reporting element

- TO DATE *and* AT COMPLETION
  - Nonrecurring
  - Recurring
  - Total



Form Approved  
OMB No.  
0704-0188

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# Cost Reporting Forms

## Summary - DD Form 1921

- Cost Data Summary Report provides summary cost data for ***all*** report elements
  - TO DATE *and* AT COMPLETION
    - Nonrecurring
    - Recurring
    - Total
- Summary cost data linked to more detailed cost data form DD1921-1



# Cost Reporting Forms

## DD Form 1921-1 (Front)

- For **select** reporting elements, Functional Cost Hour Report provides detailed functional breakout of resource data
  - Engineering
  - Tooling
  - Quality Control
  - Manufacturing



# Cost Reporting Forms

## DD Form 1921-1 (Front)

	Nonrecurring	Recurring
<b>Engineering</b>	study, analysis, design  preparation of specifications, drawings, parts lists, and wiring diagrams  determination and specification of requirements for reliability & maintainability	sustaining engineering  maintenance and updating of drawings and data  continuous support of the fabrication, assembly, & test  continuous support during delivery of contract end items
<b>Tooling</b>	design and development of basic tooling through its initial release  include jigs, dies, fixtures, molds, patterns, and special gauges  Sometimes called special tools - their use is limited to the needs of the customer	sustaining tooling that involves the maintenance, repair, modification and replacement of basic tooling
<b>Quality Control</b>	planning of inspection methods	check, physically inspect, measure, and test the product
<b>Manufacturing</b>		fabrication, assembly, and functional testing of a product or end item  convert a raw material into finished items



<b>SECURITY CLASSIFICATION</b>		<b>FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT</b>		Form Approved OMB No. 0704- 0188	
The public reporting burden for this collection of information is estimated to average 45 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS</b>					
1a. PROGRAM _____		1b. APPROVED PLAN NUMBER _____		2. REPORT AS OF (MM/DD/YY) _____	
4a. CONTRACTOR TYPE <input type="checkbox"/> PRIME/ASSOCIATE <input type="checkbox"/> SUBCONTRACTOR <input type="checkbox"/> SUBCONTRACT (Estimate by Reporting Contractor)				3. FY FUNDED _____	
4 b. NAME/ADDRESS (Include ZIP Code) _____				5. DOLLARS IN _____	
7a. CUSTOMER (Subcontractors Use Only) _____		7b. SUBCONTRACTOR (Estimated by Reporting Contractor) _____		8. SUBCONTRACT NO. _____	
9. NUMBER OF REPORTING SUBCONTRACTORS _____		10. TYPE ACTION _____ LATEST AMENDMENT _____			
11. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO		CONTRACT NO. _____ RFP NO. _____ PROGRAM ESTIMATE _____			
12. WBS ELEMENT CODE _____		<b>PART I. FUNCTIONAL COST-HOUR REPORT</b>			
13. REPORTING ELEMENT _____		14. COST TYPE <input type="checkbox"/> RECURRING <input type="checkbox"/> NONRECURRING <input type="checkbox"/> TOTAL		15. QUANTITY TO DATE _____ AT COMPLETION _____	
		16. APPROPRIATION <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT			
<b>DATA ELEMENTS</b>		<b>REPORTING CONTRACTOR</b>		<b>SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES</b>	
		<b>TOTAL</b>			
		<b>TO DATE A</b>		<b>AT COMPLETION B</b>	
		<b>TO DATE C</b>		<b>AT COMPLETION D</b>	
		<b>TO DATE E</b>		<b>AT COMPLETION F</b>	
<b>ENGINEERING</b>					
1. DIRECT LABOR HOURS					
2. DIRECT LABOR DOLLARS					
3. OVERHEAD					
4. MATERIAL					
5. OTHER DIRECT CHARGES (Specify)					
6. TOTAL ENGINEERING DOLLARS					
<b>TOOLING</b>					
7. DIRECT LABOR HOURS					
8. DIRECT LABOR DOLLARS					
9. OVERHEAD					
10. MATERIAL AND PURCHASED TOOLS					
11. OTHER DIRECT CHARGES (Specify)					
12. TOTAL TOOLING DOLLARS					
<b>QUALITY CONTROL</b>					
13. DIRECT LABOR HOURS					
14. DIRECT LABOR DOLLARS					
15. OVERHEAD					
16. OTHER DIRECT CHARGES (Specify)					
17. TOTAL QUALITY CONTROL DOLLARS					
<b>MANUFACTURING</b>					
18. DIRECT LABOR HOURS					
19. DIRECT LABOR DOLLARS					
20. OVERHEAD					
21. MATERIALS AND PURCHASED PARTS					
22. OTHER DIRECT CHARGES (Specify)					
23. TOTAL MANUFACTURING DOLLARS					
<b>OTHER COSTS</b>					
24. PURCHASED EQUIPMENT					
25. MATERIAL OVERHEAD					
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)					
<b>SUMMARY</b>					
27. TOTAL COST (Direct and Overhead)					
28. REMARKS					

<b>POINT OF CONTACT (POC) INFORMATION</b>		
29a. NAME (Last, First, Middle Initial)	29b. DEPARTMENT	29c. TELEPHONE NO. (Include Area Code)
29d. E-MAIL ADDRESS	29e. FAX NO. (Include Area Code)	29f. SIGNATURE
		29g. DATE SIGNED (MM/DD/YY)



# Cost Reporting Forms

## Exhibit – Blank DD Form 1921-1 (Front)

SECURITY CLASSIFICATION		FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT		Form Approved OMB No. 0704-0188	
<small>The public reporting burden for this collection of information is estimated to average 45 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS</small>					
1a. PROGRAM		1b. APPROVED PLAN NUMBER		2. REPORT DATE (MM/DD/YY)	
4a. CONTRACTOR TYPE <input type="checkbox"/> PRIME/ASSOCIATE <input type="checkbox"/> SUBCONTRACTOR <input type="checkbox"/> SUBCONTRACT (Estimate by Reporting Contractor)		4b. NAME/ADDRESS (Include ZIP Code)		3. FY FUNDED	
7a. CUSTOMER (Subcontractors Use Only)		7b. SUBCONTRACTOR (If Estimated by Reporting Contractor)		8. SUBCONTRACT NO.	
9. NUMBER OF REPORTING SUBCONTRACTORS		10. TYPE ACTION <input type="checkbox"/> CONTRACT NO. <input type="checkbox"/> RFP NO. <input type="checkbox"/> PROGRAM ESTIMATE		LATEST AM	
11. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO		12. WBS ELEMENT CODE		13. REPORTING ELEMENT	
14. COST TYPE RECURRING NONRECURRING TOTAL		15. QUANTITY TO DATE AT COMPLETION		PART I. FUNCTIONAL COST-HOUR	
REPORTING CONTRACTOR		SUBCONTRACT OR OUTS PRODUCTION AND SERVICE			
TO DATE A		AT COMPLETION B		TO DATE C	
AT COMPLETION D					
DATA ELEMENTS					
<b>ENGINEERING</b>					
1. DIRECT LABOR HOURS					
2. DIRECT LABOR DOLLARS					
3. OVERHEAD					
4. MATERIAL					
5. OTHER DIRECT CHARGES (Specify)					
6. TOTAL ENGINEERING DOLLARS					
<b>TOOLING</b>					
7. DIRECT LABOR HOURS					
8. DIRECT LABOR DOLLARS					
9. OVERHEAD					
10. MATERIAL AND PURCHASED TOOLS					
11. OTHER DIRECT CHARGES (Specify)					
12. TOTAL TOOLING DOLLARS					
<b>QUALITY CONTROL</b>					
13. DIRECT LABOR HOURS					
14. DIRECT LABOR DOLLARS					
15. OVERHEAD					
16. OTHER DIRECT CHARGES (Specify)					
17. TOTAL QUALITY CONTROL DOLLARS					
<b>MANUFACTURING</b>					
18. DIRECT LABOR HOURS					
19. DIRECT LABOR DOLLARS					
20. OVERHEAD					
21. MATERIALS AND PURCHASED PARTS					
22. OTHER DIRECT CHARGES (Specify)					
23. TOTAL MANUFACTURING DOLLARS					
<b>OTHER COSTS</b>					
24. PURCHASED EQUIPMENT					
25. MATERIAL OVERHEAD					
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)					
<b>SUMMARY</b>					
27. TOTAL COST (Direct and Overhead)					
28. REMARKS					
POINT OF CONTACT (POC) INFORMATION					
29a. NAME (Last, First, Middle Initial)		29b. DEPARTMENT		29c. TELEPHONE NO. (Include Area Code)	
29d. E-MAIL ADDRESS		29e. FAX NO. (Include Area Code)		29f. SIGNATURE	
				29g. DATE SIGNED (MM/DD/YY)	

These fields must correspond exactly to Approved Plan

- Program Name
- Approved Plan Number
- Reporting Elements
- WBS Element Code







# Cost Reporting Forms

## Exhibit – Blank DD Form 1921-1 (Front)

SECURITY CLASSIFICATION					
FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT					
Form Approved OMB No. 0704-0188					
<small>The public reporting burden for this collection of information is estimated to average 45 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS</small>					
1a. PROGRAM	1b. APPROVED PLAN NUMBER	2. REPORT AS OF (MMDDYY)	3. FY FUNDED		
4. CONTRACTOR TYPE <input type="checkbox"/> PRIME/ASSOCIATE <input type="checkbox"/> SUBCONTRACTOR <input type="checkbox"/> SUBCONTRACT (Estimate by Reporting Contractor)		5. DOLLARS IN	6. HOURS IN		
4b. NAME/ADDRESS (Include ZIP Code)		7a. CUSTOMER (Subcontractors Use Only)			
7b. SUBCONTRACTOR (Estimated by Reporting Contractor)		8. SUBCONTRACT NO.			
9. NUMBER OF REPORTING SUBCONTRACTORS		10. TYPE ACTION <input type="checkbox"/> CONTRACT NO. <input type="checkbox"/> RFP NO. <input type="checkbox"/> PROGRAM ESTIMATE			
11. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO		12. WBS ELEMENT CODE			
13. REPORTING ELEMENT		14. COST TYPE <input type="checkbox"/> RECURRING <input type="checkbox"/> NONRECURRING <input type="checkbox"/> TOTAL			
15. QUANTITY TO DATE		16. APPROPRIATION <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT			
17. REPORTING CONTRACTOR		18. SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES		19. TOTAL	
TO DATE A		AT COMPLETION B		TO DATE C	
AT COMPLETION D		TO DATE E		AT COMPLETION F	
DATA ELEMENTS					
<b>ENGINEERING</b>					
1. DIRECT LABOR HOURS					
2. DIRECT LABOR DOLLARS					
3. OVERHEAD					
4. MATERIAL					
5. OTHER DIRECT CHARGE					
6. TOTAL ENGINEERING					
<b>TOOLING</b>					
7. DIRECT LABOR HOURS					
8. DIRECT LABOR DOLLARS					
9. OVERHEAD					
10. MATERIAL AND PURCHASE					
11. OTHER DIRECT CHARGE					
12. TOTAL TOOLING DOLLARS					
<b>QUALITY CONTROL</b>					
13. DIRECT LABOR HOURS					
14. DIRECT LABOR DOLLARS					
15. OVERHEAD					
16. OTHER DIRECT CHARGE					
17. TOTAL QUALITY CONTROL					
<b>MANUFACTURING</b>					
18. DIRECT LABOR HOURS					
19. DIRECT LABOR DOLLARS					
20. OVERHEAD					
21. MATERIALS AND PURCHASE					
22. OTHER DIRECT CHARGE					
23. TOTAL MANUFACTURING					
<b>OTHER COSTS</b>					
24. PURCHASED EQUIPMENT					
25. MATERIAL OVERHEAD					
26. OTHER COSTS NOT					
<b>SUMMARY</b>					
27. TOTAL COST (Direct + Indirect)					
28. REMARKS					
29a. NAME (Last, First, Middle)					
29d. E-MAIL ADDRESS					

These fields correspond to the contracting arrangement

- Contract Type
- Number of Reporting Subcontracts
- Contractor Type
- Contract/RFP Number
- Multi-year Contract
- Customer (applicable to Subcontractors only)
- Subcontractor (Estimate by Reporting Contractor)



# Cost Reporting Forms

## Exhibit – Blank DD Form 1921-1 (Front)

SECURITY CLASSIFICATION		FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT		Form Approved OMB No. 0704-0188	
<small>The public reporting burden for this collection of information is estimated to average 45 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS</small>					
1a. PROGRAM		1b. APPROVED PLAN NUMBER		2. REPORT AS OF (MM/DD/YY)	
4a. CONTRACTOR TYPE <input type="checkbox"/> PRIME/ASSOCIATE <input type="checkbox"/> SUBCONTRACTOR <input type="checkbox"/> SUBCONTRACT (Estimate by Reporting Contractor)		5. DOLLARS IN		6. HOURS IN	
4 b. NAME/ADDRESS (Include ZIP Code)					
7a. CUSTOMER (Subcontractors Use Only)		7b. SUBCONTRACTOR (Estimated by Reporting Contractor)		8.	
9. NUMBER OF REPORTING SUBCONTRACTORS		10. TYPE ACTION CONTRACT NO. _____ RFP NO. _____ PROGRAM ESTIMATE _____		PART	
11. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO		12. WBS ELEMENT CODE		13. REPORTING ELEMENT	
14. COST TYPE <input type="checkbox"/> RECURRING <input type="checkbox"/> NONRECURRING <input type="checkbox"/> TOTAL		15. QUANTITY TO DATE AT COMPLETION		E	
DATA ELEMENTS		REPORTING CONTRACTOR		TO DATE A AT COMPLETION B	
ENGINEERING					
1. DIRECT LABOR HOURS					
2. DIRECT LABOR DOLLARS					
3. OVERHEAD					
4. MATERIAL					
5. OTHER DIRECT CHARGES (Specify)					
6. TOTAL ENGINEERING DOLLARS					
TOOLING					
7. DIRECT LABOR HOURS					
8. DIRECT LABOR DOLLARS					
9. OVERHEAD					
10. MATERIAL AND PURCHASED TOOLS					
11. OTHER DIRECT CHARGES (Specify)					
12. TOTAL TOOLING DOLLARS					
QUALITY CONTROL					
13. DIRECT LABOR HOURS					
14. DIRECT LABOR DOLLARS					
15. OVERHEAD					
16. OTHER DIRECT CHARGES (Specify)					
17. TOTAL QUALITY CONTROL DOLLARS					
MANUFACTURING					
18. DIRECT LABOR HOURS					
19. DIRECT LABOR DOLLARS					
20. OVERHEAD					
21. MATERIALS AND PURCHASED PARTS					
22. OTHER DIRECT CHARGES (Specify)					
23. TOTAL MANUFACTURING DOLLARS					
OTHER COSTS					
24. PURCHASED EQUIPMENT					
25. MATERIAL OVERHEAD					
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)					
SUMMARY					
27. TOTAL COST (Direct and Overhead)					
28. REMARKS					
POINT OF CONTACT (POC) INFORMATION					
29a. NAME (Last, First, Middle Initial)		29b. DEPARTMENT			
29d. E-MAIL ADDRESS		29e. FAX NO. (Include Area Code)		29f. SIGNATURE	
				29g. DATE SIGNED (MM/DD/YY)	

Displays actual costs by functional category

Each functional area is broken out

- Direct Labor (hours and dollars)
- Overhead (dollars)
- Material (dollars)
- Other Direct Charges (dollars)

Data field for Other costs

General and Administrative (G&A) expenses and profit **NO LONGER** reported separately at the bottom of the report



# Cost Reporting Forms

## DD 1921-1 (Front) Linkage to DD 1921

1921-1 (Front), Row 27 Summary  
 "Total Cost" flows into the 1921  
 -- Recurring/Nonrecurring/Total  
 -- To Date/At Completion

[illegible]



# Cost Reporting Forms

## DD 1921-1 (Front) re. Subcontractor Data

### 1. Subcontractor – Direct Reporting NOT Required per CWIPT

- **Price** reported in columns A & B under Reporting Contractor
  - Typically Row 24 (Purchased Equipment)
  - Alternatively use ODC per specific function (Engineering, Tooling, QC, or Manufacturing) as applicable

### 2. Subcontractor – Direct Reporting Required per CWIPT

#### a) Direct to DCARC (proper)



- **Price** reported in Row 24 (Purchased Equipment) in columns C & D
- Alternatively, use ODC per specific function (Engineering, Tooling, QC, or Manufacturing) as applicable

#### b) Direct to Prime (by exception: legacy, as applicable)

- **Cost/hours** reported Rows 1-27 in columns C & D

# 1. Subcontractor - Direct Reporting NOT Required per CWIPT

DATA ELEMENTS	REPORTING CONTRACTOR		SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES		TOTAL	
	TO DATE	AT COMPLETION	TO DATE	AT COMPLETION	TO DATE	AT COMPLETION
	A	B	C	D	E	F
<b>ENGINEERING</b>						
1. DIRECT LABOR HOURS						
2. DIRECT LABOR DOLLARS						
3. OVERHEAD						
4. MATERIAL						
5. OTHER DIRECT CHARGES (Specify)	\$\$\$	\$\$\$				
6. TOTAL ENGINEERING DOLLARS	\$\$\$	\$\$\$				
<b>TOOLING</b>						
7. DIRECT LABOR HOURS						
8. DIRECT LABOR DOLLARS						
9. OVERHEAD						
10. MATERIAL AND PURCHASED TOOLS						
11. OTHER DIRECT CHARGES (Specify)	\$\$\$	\$\$\$				
12. TOTAL TOOLING DOLLARS	\$\$\$	\$\$\$				
<b>QUALITY CONTROL</b>						
13. DIRECT LABOR HOURS						
14. DIRECT LABOR DOLLARS						
15. OVERHEAD						
16. OTHER DIRECT CHARGES (Specify)	\$\$\$	\$\$\$				
17. TOTAL QUALITY CONTROL DOLLARS	\$\$\$	\$\$\$				
<b>MANUFACTURING</b>						
18. DIRECT LABOR HOURS						
19. DIRECT LABOR DOLLARS						
20. OVERHEAD						
21. MATERIALS AND PURCHASED PARTS						
22. OTHER DIRECT CHARGES (Specify)	\$\$\$	\$\$\$				
23. TOTAL MANUFACTURING DOLLARS	\$\$\$	\$\$\$				
<b>OTHER COSTS</b>						
24. PURCHASED EQUIPMENT	\$\$\$	\$\$\$				
25. MATERIAL OVERHEAD						
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)						
<b>SUMMARY</b>						
27. TOTAL COST (Direct and Overhead)	\$\$\$	\$\$\$				
28. REMARKS						
<p><b>EXAMPLE:</b></p> <p><b>COSTS FOR SUBCONTRACTS THAT HAVE NOT EXCEEDED THE CSDR REPORTING THRESHOLD AND THE CWIPT HAS NOT LEVIED CSDR REQUIREMENTS ON SUBCONTRACT</b></p> <p><b>THE PRIME SIMPLY REPORTS PRICE AS PURCHASED EQUIPMENT UNDER COLUMNS A &amp; B.</b></p> <p><b>ALTERNATIVELY, THE PRIME MAY REPORT PRICE UNDER FUNCTIONAL ODC UNDER COLUMNS A &amp; B.</b></p>						
<b>POINT OF CONTACT (POC) INFORMATION</b>						
29a. NAME (Last, First, Middle Initial)		29b. DEPARTMENT		29c. TELEPHONE NO. (Include Area Code)		
29d. E-MAIL ADDRESS		29e. FAX NO. (Include Area Code)		29f. SIGNATURE		29g. DATE SIGNED (MM/DD/YY)

## 2. Subcontractor - Direct Reporting Required per CWIPT

### a.) Direct to DCARC (proper)

DATA ELEMENTS	REPORTING CONTRACTOR		SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES		TOTAL	
	TO DATE	AT COMPLETION	TO DATE	AT COMPLETION	TO DATE	AT COMPLETION
	A	B	C	D	E	F
<b>ENGINEERING</b>						
1. DIRECT LABOR HOURS						
2. DIRECT LABOR DOLLARS						
3. OVERHEAD						
4. MATERIAL						
5. OTHER DIRECT CHARGES (Specify)			\$\$\$	\$\$\$		
6. TOTAL ENGINEERING DOLLARS			\$\$\$	\$\$\$		
<b>TOOLING</b>						
7. DIRECT LABOR HOURS						
8. DIRECT LABOR DOLLARS						
9. OVERHEAD						
10. MATERIAL AND PURCHASED TOOLS						
11. OTHER DIRECT CHARGES (Specify)			\$\$\$	\$\$\$		
12. TOTAL TOOLING DOLLARS			\$\$\$	\$\$\$		
<b>QUALITY CONTROL</b>						
13. DIRECT LABOR HOURS						
14. DIRECT LABOR DOLLARS						
15. OVERHEAD						
16. OTHER DIRECT CHARGES (Specify)			\$\$\$	\$\$\$		
17. TOTAL QUALITY CONTROL DOLLARS			\$\$\$	\$\$\$		
<b>MANUFACTURING</b>						
18. DIRECT LABOR HOURS						
19. DIRECT LABOR DOLLARS						
20. OVERHEAD						
21. MATERIALS AND PURCHASED PARTS						
22. OTHER DIRECT CHARGES (Specify)			\$\$\$	\$\$\$		
23. TOTAL MANUFACTURING DOLLARS			\$\$\$	\$\$\$		
<b>OTHER COSTS</b>						
24. PURCHASED EQUIPMENT			\$\$\$	\$\$\$		
25. MATERIAL OVERHEAD						
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)						
<b>SUMMARY</b>						
27. TOTAL COST (Direct and Overhead)			\$\$\$	\$\$\$		
28. REMARKS						
<p><b>EXAMPLE:</b></p> <p><b>COSTS FOR SUBCONTRACTS THAT MEET OR EXCEED THE CSDR REPORTING THRESHOLD OR THE CWIPT HAS LEVIED CSDR REQUIREMENTS ON SUBCONTRACT DUE TO INTEREST THE PRIME HAS PROPERLY FLOWED DOWN REQUIREMENTS</b></p> <p><b>PRIME SIMPLY REPORTS PRICE AS PURCHASED EQUIPMENT UNDER COLUMNS C &amp; D. ALTERNATIVELY, THE PRIME MAY REPORT PRICE UNDER FUNCTIONAL ODC UNDER COLUMNS C &amp; D. THE SUB IS DIRECTLY REPORTING TO DCARC.</b></p>						
<b>POINT OF CONTACT (POC) INFORMATION</b>						
29a. NAME (Last, First, Middle Initial)		29b. DEPARTMENT		29c. TELEPHONE NO. (Include Area Code)		
29d. E-MAIL ADDRESS		29e. FAX NO. (Include Area Code)		29f. SIGNATURE		29g. DATE SIGNED (MM/DD/YY)

## 2. Subcontractor - Direct Reporting Required per CWIPT

### b.) Direct to Prime (by exception: legacy, as applicable)

DATA ELEMENTS	REPORTING CONTRACTOR		SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES		TOTAL	
	TO DATE	AT COMPLETION	TO DATE	AT COMPLETION	TO DATE	AT COMPLETION
	A	B	C	D	E	F
<b>ENGINEERING</b>						
1. DIRECT LABOR HOURS						
2. DIRECT LABOR DOLLARS						
3. OVERHEAD						
4. MATERIAL						
5. OTHER DIRECT CHARGES (Specify)						
6. TOTAL ENGINEERING DOLLARS						
<b>TOOLING</b>						
7. DIRECT LABOR HOURS						
8. DIRECT LABOR DOLLARS						
9. OVERHEAD						
10. MATERIAL AND PURCHASED TOOLS						
11. OTHER DIRECT CHARGES (Specify)						
12. TOTAL TOOLING DOLLARS						
<b>QUALITY CONTROL</b>						
13. DIRECT LABOR HOURS						
14. DIRECT LABOR DOLLARS						
15. OVERHEAD						
16. OTHER DIRECT CHARGES (Specify)						
17. TOTAL QUALITY CONTROL DOLLARS						
<b>MANUFACTURING</b>						
18. DIRECT LABOR HOURS						
19. DIRECT LABOR DOLLARS						
20. OVERHEAD						
21. MATERIALS AND PURCHASED PARTS						
22. OTHER DIRECT CHARGES (Specify)						
23. TOTAL MANUFACTURING DOLLARS						
<b>OTHER COSTS</b>						
24. PURCHASED EQUIPMENT						
25. MATERIAL OVERHEAD						
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)						
<b>SUMMARY</b>						
27. TOTAL COST (Direct and Overhead)						
<p>28. REMARKS</p> <p><b>EXAMPLE:</b></p> <p><b>COSTS FOR SUBCONTRACTS THAT MEET OR EXCEED THE CSDR REPORTING THRESHOLD OR THE CWIPT HAS LEVIED CSDR REQUIREMENTS ON SUBCONTRACT DUE TO INTEREST</b></p> <p><b>THE PRIME HAS PROPERLY FLOWED DOWN REQUIREMENTS</b></p> <p><b>THE SUB IS DIRECTLY REPORTING TO THE PRIME ("LEGACY" OR TEAMING TECHNIQUE)</b></p> <p><b>PRIME REPORTS ALL DATA AS PROVIDED BY THE SUBCONTRACTOR UNDER COLUMNS C &amp; D</b></p>						
<b>POINT OF CONTACT (POC) INFORMATION</b>						
29a. NAME (Last First Middle Initial)		29b. DEPARTMENT		29c. TELEPHONE NO. (Include Area Code)		
29d. E-MAIL ADDRESS		29e. FAX NO. (Include Area Code)		29f. SIGNATURE		29g. DATE SIGNED (MM/DD/YY)



# Cost Reporting Forms

## Summary - DD Form 1921-1 (Front)

- Functional Cost Hour Report provides detailed resource data for **select** reporting elements and total contract
- Cost data linked to DD 1921-1 (Back) and Cost Data Summary Report





SECURITY CLASSIFICATION		FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT									
PART II. PROGRESS CURVE REPORT											
1. WBS ELEMENT CODE		3. UNITS/LOTS COMPLETED (Specify)									
2. REPORTING ELEMENT		<input type="checkbox"/> UNIT TOTAL OR <input type="checkbox"/> UNIT AVERAGE				<input type="checkbox"/> LOT TOTAL OR <input type="checkbox"/> LOT AVERAGE					
		COMPLETED UNITS/LOTS A				WORK-IN-PROCESS (WIP) B		TO COMPLETE C			
DATA ELEMENTS		1	2	3	4						
1. MODEL AND SERIES											
2. FIRST UNIT OF LOT/WIP UNITS											
3. LAST UNIT OF LOT											
4. CONCURRENT UNITS/LOTS											
CHARACTERISTICS											
5.a											
5.b											
5.c											
PRIME CONTRACTOR											
6. DIRECT QUALITY CONTROL LABOR HOURS											
7. DIRECT MANUFACTURING LABOR HOURS											
8. TOTAL DIRECT LABOR HOURS											
9. DIRECT QUALITY CONTROL LABOR DOLLARS											
10. DIRECT MANUFACTURING LABOR DOLLARS											
11. TOTAL DIRECT LABOR DOLLARS											
12. RAW MATERIALS AND PURCHASED PARTS											
13. PURCHASED EQUIPMENT											
14. TOTAL DIRECT DOLLARS											
SUBCONTRACT/OUTSIDE PRODUCTS AND SERVICES											
15. DIRECT QUALITY CONTROL LABOR HOURS											
16. DIRECT MANUFACTURING LABOR HOURS											
17. TOTAL DIRECT LABOR HOURS											
18. DIRECT QUALITY CONTROL LABOR DOLLARS											
19. DIRECT MANUFACTURING LABOR DOLLARS											
20. TOTAL DIRECT LABOR DOLLARS											
21. RAW MATERIALS AND PURCHASED PARTS											
22. PURCHASED EQUIPMENT											
23. TOTAL DIRECT DOLLARS											
TOTAL PER UNIT/LOT											
24. DIRECT QUALITY CONTROL LABOR HOURS											
25. DIRECT MANUFACTURING LABOR HOURS											
26. TOTAL DIRECT LABOR HOURS											
27. DIRECT QUALITY CONTROL LABOR DOLLARS											
28. DIRECT MANUFACTURING LABOR DOLLARS											
29. TOTAL DIRECT DIRECT LABOR DOLLARS											
30. RAW MATERIALS AND PURCHASED PARTS											
31. PURCHASED EQUIPMENT											
32. TOTAL DIRECT DOLLARS											
33. % SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES											
34. REMARKS											
POINT OF CONTACT (POC) INFORMATION											
35a. NAME (Last, First, Middle Initial)				35b. DEPARTMENT				35c. TELEPHONE NO. (Include Area Code)			
35d. E-MAIL ADDRESS				35e. FAX NO. (Include Area Code)				35f. SIGNATURE		35g. DATE SIGNED (MM/DD/YYYY)	
DD FORM 1921-1, (BACK), OCT 2003											



# Cost Reporting Forms

## Exhibit – Blank DD Form 1921-1 (Back)

SECURITY CLASSIFICATION	
FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT	
<b>PART II. PROGRESS CURVE REPORT</b>	
1. WBS ELEMENT CODE	3. UNITS/LOTS COMPLETED (Specify)
2. REPORTING ELEMENT	<input type="checkbox"/> UNIT TOTAL OR <input type="checkbox"/> UNIT AVERAGE
	<input type="checkbox"/> LOT TOTAL OR <input type="checkbox"/> LOT AVERAGE
	COMPLETED UNITS/LOTS A
	WORK-IN-PROCESS (WIP)
	TO COMPLETE
<b>DATA ELEMENTS</b>	
1. MODEL AND SERIES	
2. FIRST UNIT OF LOT/WIP UNITS	
3. LAST UNIT OF LOT	
4. CONCURRENT UNITS/LOTS	
<b>CHARACTERISTICS</b>	
5.a	
5.b	
5.c	
<b>PRIME CONTRACTOR</b>	
6. DIRECT QUALITY CONTROL LABOR HOURS	
7. DIRECT MANUFACTURING LABOR HOURS	
8. TOTAL DIRECT LABOR HOURS	
9. DIRECT QUALITY CONTROL LABOR DOLLARS	
10. DIRECT MANUFACTURING LABOR DOLLARS	
11. TOTAL DIRECT LABOR DOLLARS	
12. RAW MATERIALS AND PURCHASED PARTS	
13. PURCHASED EQUIPMENT	
14. TOTAL DIRECT DOLLARS	
<b>SUBCONTRACT/OUTSIDE PRODUCTS AND SERVICES</b>	
15. DIRECT QUALITY CONTROL LABOR HOURS	
16. DIRECT MANUFACTURING LABOR HOURS	
17. TOTAL DIRECT LABOR HOURS	
18. DIRECT QUALITY CONTROL LABOR DOLLARS	
19. DIRECT MANUFACTURING LABOR DOLLARS	
20. TOTAL SUBCONTRACT DOLLARS	
21. TOTAL LABOR DOLLARS	
22. TOTAL MATERIALS AND EQUIPMENT DOLLARS	
23. TOTAL COST DOLLARS	
24. TOTAL COST PER UNIT/LOT	
25. TOTAL COST PER HOURS	
26. TOTAL COST PER SQUARE FOOT	
27. TOTAL COST PER CUBIC FOOT	
28. TOTAL COST PER LINEAL FOOT	
29. TOTAL COST PER SQUARE YARD	
30. TOTAL COST PER CUBIC YARD	
31. TOTAL COST PER LINEAL YARD	
32. TOTAL COST PER SQUARE METER	
33. TOTAL COST PER CUBIC METER	
34. TOTAL COST PER LINEAL METER	
35. TOTAL COST PER SQUARE KILOMETER	
36. TOTAL COST PER CUBIC KILOMETER	
37. TOTAL COST PER LINEAL KILOMETER	
38. TOTAL COST PER SQUARE MILE	
39. TOTAL COST PER CUBIC MILE	
40. TOTAL COST PER LINEAL MILE	
<b>CONTACT (POC) INFORMATION</b>	
35a. DEPARTMENT	35c. TELEPHONE NO. (Include Area Code)
35d. E-MAIL ADDRESS	35e. FAX NO. (Include Area Code)
35f. SIGNATURE	35g. DATE SIGNED (MM/DD/YY)

Obtained for select WBS elements

Must correspond to naming convention and numbering scheme of DD 1921 and Approved Plan

- WBS Element Code
- Reporting Element

### Development Contracts

- Report by unit unless otherwise specified in the contract

### LRIP/Production Contracts

- Also used during the first few years of production for large quantity of end items



# Cost Reporting Forms

## Exhibit – Blank DD Form 1921-1 (Back)

SECURITY CLASSIFICATION		FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT									
PART II. PROGRESS CURVE REPORT											
1. WBS ELEMENT CODE				3. UNITS/LOTS COMPLETED (Specify)				<input type="checkbox"/> UNIT TOTAL OR <input type="checkbox"/> UNIT AVERAGE			
2. REPORTING ELEMENT								<input type="checkbox"/> LOT TOTAL OR <input type="checkbox"/> LOT AVERAGE			
				COMPLETED UNITS/LOTS				WORK-IN-PROCESS (WIP)		TO COMPLETE	
				A						C	
DATA ELEMENTS											
1. FIRST AND SERIES				1				2		3	
2. FIRST UNIT OF LOT/WIP UNITS				2				3		4	
3. LAST UNIT OF LOT				3				4		5	
4. CONCURRENT UNITS/LOTS				4				5		6	
CHARGE NOTICE				5				6		7	
5a				6				7		8	
5b				7				8		9	
5c				8				9		10	
PRIME CONTRACTOR				9				10		11	
6. DIRECT QUALITY CONTROL LABOR HOURS				10				11		12	
7. DIRECT MANUFACTURING LABOR HOURS				11				12		13	
8. TOTAL DIRECT LABOR HOURS				12				13		14	
9. DIRECT QUALITY CONTROL LABOR DOLLARS				13				14		15	
10. DIRECT MANUFACTURING LABOR DOLLARS				14				15		16	
11. TOTAL DIRECT LABOR DOLLARS				15				16		17	
12. RAW MATERIALS AND PURCHASED PARTS				16				17		18	
13. PURCHASED EQUIPMENT				17				18		19	
14. TOTAL DIRECT DOLLARS				18				19		20	
SUBCONTRACT/OUTSIDE PRODUCTS AND SERVICES				19				20		21	
15. DIRECT QUALITY CONTROL LABOR HOURS				20				21		22	
16. DIRECT MANUFACTURING LABOR HOURS				21				22		23	
17. TOTAL DIRECT LABOR HOURS				22				23		24	
18. DIRECT QUALITY CONTROL LABOR DOLLARS				23				24		25	
19. DIRECT MANUFACTURING LABOR DOLLARS				24				25		26	
20. TOTAL DIRECT LABOR DOLLARS				25				26		27	
21. RAW MATERIALS AND PURCHASED PARTS				26				27		28	
22. PURCHASED EQUIPMENT				27				28		29	
23. TOTAL DIRECT DOLLARS				28				29		30	
TOTAL PER UNIT/LOT				29				30		31	
24. DIRECT QUALITY CONTROL LABOR HOURS				30				31		32	
25. DIRECT MANUFACTURING LABOR HOURS				31				32		33	
26. TOTAL DIRECT LABOR HOURS				32				33		34	
27. DIRECT QUALITY CONTROL LABOR DOLLARS				33				34		35	
28. DIRECT MANUFACTURING LABOR DOLLARS				34				35		36	
29. TOTAL DIRECT LABOR DOLLARS				35				36		37	
30. RAW MATERIALS AND PURCHASED PARTS				36				37		38	
31. PURCHASED EQUIPMENT				37				38		39	
32. TOTAL DIRECT DOLLARS				38				39		40	
33. SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES				39				40		41	
34. REMARKS				40				41		42	
35a. NAME (Last, First, Middle Initial)				35b. FAX NO.				35c. FAX NO.		35d. FAX NO.	
35d. E-MAIL ADDRESS				35e. FAX NO.				35f. FAX NO.		35g. FAX NO.	

Provides data for calculating learning curves

- Data displayed by Lot or by Unit
- First unit number & last unit number

## Cost Data linked to DD 1921-1 (Front)

- Recurring manufacturing and QC direct labor hours and cost
- Recurring manufacturing raw materials/purchased parts and purchased equipment



# Cost Reporting Forms

## Exhibit – Blank DD Form 1921-1 (Back)

SECURITY CLASSIFICATION	
FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT	
<b>PART II. PROGRESS CURVE REPORT</b>	
1. WBS ELEMENT CODE	3. UNITS/LOTS COMPLETED (Specify) <input type="checkbox"/> UNIT TOTAL OR <input type="checkbox"/> UNIT AVERAGE
2. REPORTING ELEMENT	<input type="checkbox"/> LOT TOTAL OR <input type="checkbox"/> LOT AVERAGE
<b>COMPLETED UNITS/LOTS</b> <b>A</b>	
<b>DATA ELEMENTS</b>	
1. MODEL AND SERIES	
2. FIRST UNIT OF LOT/WIP UNITS	
3. LAST UNIT OF LOT	
4. CONCURRENT UNITS/OTS	
<b>CHARACTERISTICS</b>	
5.a	
5.b	
5.c	
<b>PRIME CONTRACTOR</b>	
6. DIRECT QUALITY CONTROL LABOR HOURS	
7. DIRECT MANUFACTURING LABOR HOURS	
<b>WORK-IN-PROCESS (WIP)</b> <b>B</b>	
<b>TO COMPLETE</b> <b>C</b>	
NF NO. (Include Area Code)	
35a DATE SIGNED (MM/DD/YY)	

Report labor hours and cost per unit/lot

### Work-In-Process

- Enter incurred cost and hour data for all units started but not yet completed during reporting period

### To Complete

- Enter estimates to complete work-in-process
- *Form to be changed to reflect AT COMPLETE*



# Cost Reporting Forms

## Summary - DD Form 1921-1 (Back)

- Progress Curve Report provides detailed resource data for *select hardware* reporting elements
- Used for modeling learning and projecting future units
  - Recurring manufacturing and QC resources
  - Recurring manufacturing raw materials/purchased parts and purchased equipment
- Cost data linked to DD 1921-1 (front)



# Cost Reporting

## Submissions to DCARC – Present

### Web Service to “upload” data

#### Benefits:

- Data Integrity, Confidentiality, and Non-repudiation
- Email notification of submissions
- Web functionality more commonly used than

digitally signed  
For Assistance email

Call DCARC

(703) 602-3301 ext.214

The screenshot shows a web browser window displaying the DCARC File Uploading form. The header includes the DCARC logo and the text "Defense Cost and Resource Center — Enhancing DoD Cost Analysis". The form title is "DCARC File Uploading". Below the title, it says "Please enter the information requested and select the file to be uploaded. All fields (except for comments) are required." The form contains several input fields: Contractor Name, Contractor Division, Contractor Location, Full Name, Phone, Fax, Email, Program, Contract Number, As of Date, and Description. The Description field has a placeholder text "[e.g., 6)0e production, LRIP Lot 2, development, etc.]". There is a File Type dropdown menu set to "DD Form 1921", a File input field with a "Browse..." button, and a Comments text area. At the bottom, there are two buttons: "Upload" and "Upload then Add Another".

**Positive Feedback of Use**



# “Show me the Money”

- Defense Automated Cost Information System (DACIMS)
  - Highly secure web-based information system that hosts the CCDR data repository
    - ~30,000 CCDRs
- Access to DACIMS
  - User must obtain an X.509 certificate and a log-in ID
  - To request a certificate, follow the registration instructions on the DCARC website (<http://dcarc.pae.osd.mil>)
  - Permits authorized government users to view, search, and download files in a secure manner

# Using CSDRs

- The OSD CAIG, by way of DOD Directive 5000.4M\*\*, provides guidance on the scope of the cost analysis, the analytical methods to be used in preparing cost estimates, and the procedures and presentation of the estimates to the Cost Analysis Improvement Group
  - *“It is expected that heavy reliance will be placed on parametric, as well as analog and engineering methods, for Milestone I and II reviews, while projections of cost actuals will be predominantly used for preparing estimates for Milestone III and subsequent reviews.”*

\*\* Chapter 2, “Criteria and Procedures for the Preparation and Presentation of Cost Analyses to the OSD CAIG”, provides information on generally accepted analytical methods under Section B. Specifically, in Section B.1., the guidance provides direction on reliance and use of cost actuals in estimating future system production costs.



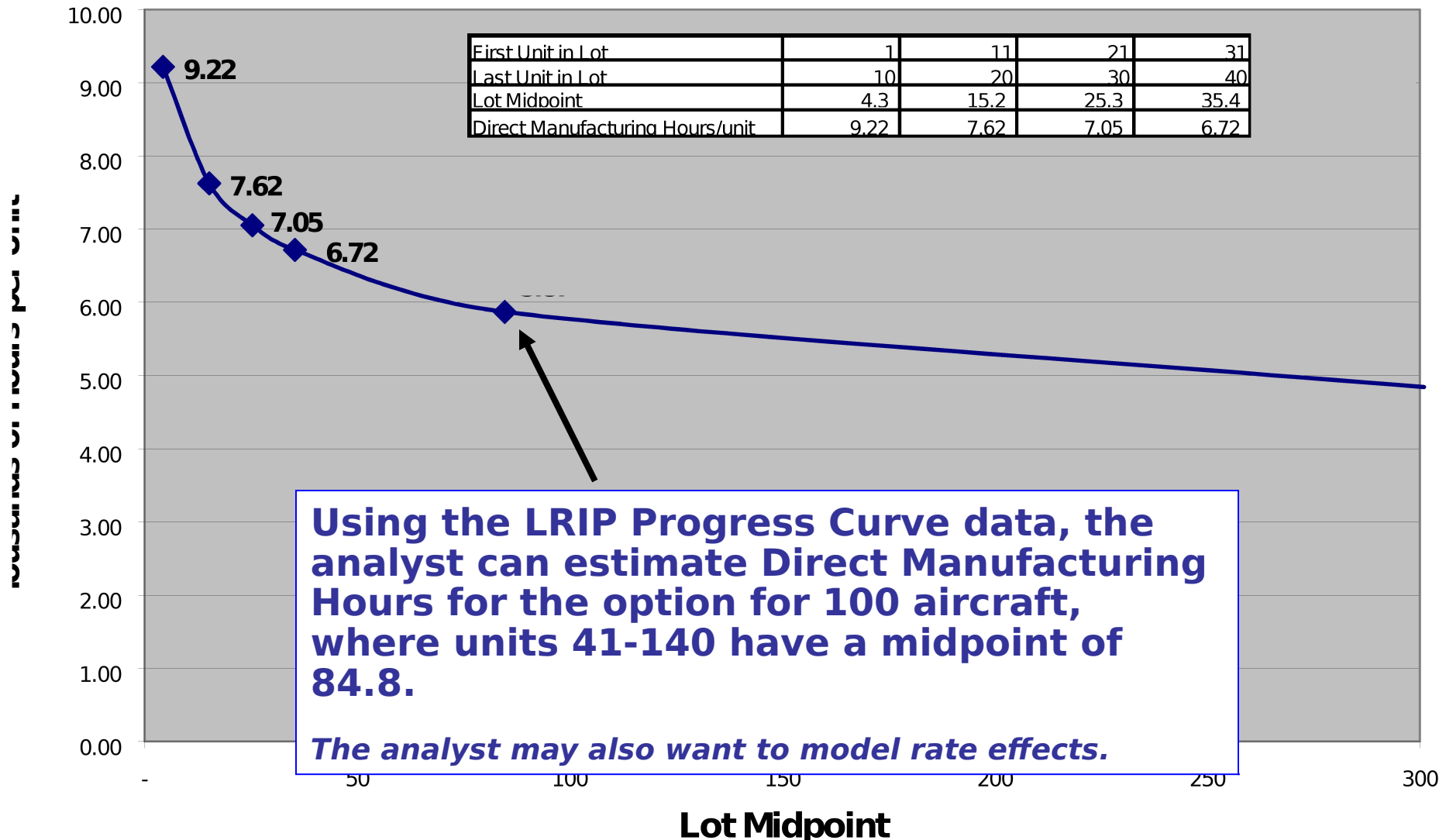
# Using CCDRs

- Reliance upon actual costs of systems as a primary method is reiterated and emphasized in section B.4, with specific references to CCDR data:
  - *“Actual cost experience on prototype units, early engineering development hardware, and early production hardware for the program under consideration should be used to the maximum extent possible from CCDR...”*
  - *“... If development or production units have been produced, the actual cost information will be provided as part of the documentation. Estimates for Milestone III reviews must be based at least in part on actual production cost data for the systems under review.”*

\*\* Chapter 2, “Criteria and Procedures for the Preparation and Presentation of Cost Analyses to the OSD CAIG”, provides information on generally accepted analytical methods under Section B. Specifically, in Section B.1., the guidance provides direction on reliance and use of cost actuals in estimating future system production costs.

# Example of Data Utility

Plot using DD 1921-1 (Back) Progress Curve Data  
**Airframe Direct Manufacturing Hours per Unit**



UNCLASSIFIED										Form Approved OMB No. 0704-0188 (MM/DD/YY)									
SECURITY CLASSIFICATION																			
COST DATA SUMMARY REPORT																			
1a. PROGRAM: Execuhawk					2. DOLLARS IN														
1b. APPROVED PLAN NUMBER: AG-03-1C					thousands														
8. CONTRACT TYPE		9. CONTRACT PRICE ESTIMATE			10. CONTRACT CEILING														
CW		\$132,356			\$140,000														
CONTRACT LINE ITEM A		REPORTING ELEMENTS			WBS ELEMENT CODE		NUMBER OF UNITS		COSTS INCURRED			NUMBER OF UNITS		TOTAL K					
									NONRECURRING F			RECURRING F		TOTAL G					
CLIN 0100		Aircraft System			1.1.1		40.0		\$17,216.1			\$83,131.2		\$100,347.3					
CLIN 0100		Air Vehicle (AV)			1.1.2		40.0		\$8,651.3			\$55,792.8		\$64,444.1					
CLIN 0100		Airframe			1.1.3		40.0		\$3,663.6			\$26,778.8		\$30,443.4					
CLIN 0100		Forward Fuselage			1.1.4		40.0		\$692.8			\$5,036.4		\$5,729.2					
CLIN 0100		Propeller Spinner			1.1.5		40.0		\$916.0			\$6,555.8		\$7,471.8					
CLIN 0100		Communications/Identification			1.1.2.1		40.0		\$337.0			\$2,465.8		\$2,802.8					
CLIN 0100		KX-155A NAV/COM Transceiver			1.1.3.1		80.0		\$743.3			\$5,353.6		\$6,097.0					
CLIN 0100		KT-76 Mode C Transponder			1.1.3.2		40.0		\$598.9			\$4,409.8		\$5,008.7					
CLIN 0100		3000-10A Emergency Locator Transmitter			1.1.3.3		40.0		\$375.6			\$2,957.4		\$3,333.0					
CLIN 0100		KDR-510 Weather Datalink			1.1.3.4		40.0		\$209.4			\$1,381.2		\$1,590.7					
CLIN 0100		Navigation/Guidance			1.1.4		40.0		\$170.6			\$1,125.5		\$1,296.1					
CLIN 0100		KLN-94 GPS			1.1.4.1		40.0		\$38.8			\$2,009.7		\$2,048.5					
CLIN 0100		KR-87 Automatic Direction Finder System			1.1.4.2		40.0		\$2,009.7			\$9,666.7		\$11,676.4					
CLIN 0100		ADF System with Compass Card			1.1.4.2.1		40.0		\$1,192.5			\$5,637.5		\$6,830.0					
CLIN 0100		KA-44B Antenna Unit			1.1.4.2.2		40.0		\$179.3			\$874.8		\$1,054.1					
CLIN 0100		Attitude Gyro			1.1.4.3		40.0		\$46.5			\$223.0		\$269.5					
CLIN 0100		Dual Mode Altimeter			1.1.4.4		40.0		\$591.4			\$2,931.3		\$3,522.8					
CLIN 0100		Magnetic Compass			1.1.4.5		40.0		\$1,011.6			\$7,069.4		\$8,081.1					
CLIN 0100		KI-208 Directional Gyro			1.1.4.6		40.0		\$371.2			\$2,715.9		\$3,087.2					
CLIN 0100		System Test and Evaluation			1.1.5		40.0		\$498.6			\$3,391.7		\$3,890.4					
CLIN 0100		Training			1.1.5.1		40.0		\$399.4			\$2,716.5		\$3,115.8					
CLIN 0100		Data			1.1.5.2		40.0		\$99.3			\$675.3		\$774.6					
CLIN 0100		Peculiar Support Equipment			1.1.5.3		40.0		\$23.5			\$153.5		\$177.0					
CLIN 0100		Common Support Equipment			1.1.5.4		40.0		\$22.4			\$153.5		\$175.8					
CLIN 0100		Initial Spares and Repair Parts			1.1.5.5		40.0		\$20.7			\$143.2		\$164.0					
CLIN 0300					1.1.6		40.0		\$75.2			\$511.6		\$586.8					
CLIN 0300							40.0		\$1,071.7			\$6,590.3		\$7,671.0					
CLIN 0300							40.0		\$631.2			\$3,836.8		\$4,468.0					
CLIN 0300							40.0		\$440.5			\$2,762.5		\$3,203.0					
CLIN 0300							40.0		\$685.2			\$4,297.2		\$4,982.5					
CLIN 0200							40.0		\$4,325.7			\$11,158.6		\$15,484.2					
CLIN 0300							40.0		\$1,730.3			\$5,579.3		\$7,309.5					
CLIN 0300							40.0		\$865.1			\$1,673.8		\$2,538.9					
CLIN 0300							40.0		\$432.6			\$1,115.9		\$1,548.4					
CLIN 0300							40.0		\$519.1			\$3,347.6		\$3,866.6					
CLIN 0300							40.0		\$259.5			\$1,673.8		\$1,933.3					
CLIN 0300							40.0		\$0.0			\$0.0		\$0.0					
CLIN 0300							40.0		\$0.0			\$0.0		\$0.0					
CLIN 0300							40.0		\$432.6			\$2,789.6		\$3,222.2					
13. REMARKS: Final report.																			
POINT OF CONTACT (POC) INFORMATION																			
14a. NAME (Last, First, Middle Initial) J. J. Price					14b. DEPARTMENT Government Procurement Programs					14c. TFI PHONE NO. (Include Area Code) (316) 555-1234									
14d. E-MAIL ADDRESS jjprice@execuhawk.com					14e. FAX NO. (Include Area Code) (316) 555-4321					14f. SIGNATURE J. J. Price					14g. DATE SIGNED (MM/DD/YY) 04/30/06				

DD FORM 1921, OCT 2003

Public reporting burden for this collection of information is estimated to average 33 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, D.C. 20503.

UNCLASSIFIED

SECURITY CLASSIFICATION

# Example of Data Utility

Hours data taken from Program A and pooled with several other programs to build a normalized, standardized dataset

**FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT**

Form Approved  
OMB No. 0705-0188

1. PROGRAM: **Program A**  
2. REPORTING ELEMENT: **11.2**  
3. REPORTING CONTRACTOR: **Radar**  
4. REPORTING CONTRACTOR: **11.2**  
5. REPORTING CONTRACTOR: **11.2**  
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98. REPORTING CONTRACTOR: **11.2**  
99. REPORTING CONTRACTOR: **11.2**  
100. REPORTING CONTRACTOR: **11.2**

12. WBS ELEMENT CODE		14. COST TYPE		15. QUANTITY		PART I. FUNCTIONAL COST-HOUR REPORT	
11.2		RECURRING		TO DATE			
Radar		NONRECURRING		AT COMPLETION			
		TOTAL					
REPORTING CONTRACTOR		SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES					
TO DATE		AT COMPLETION		TO DATE		AT COMPLETION	
A		B		C		D	
E		F					
ENGINEERING							
1. DIRECT LABOR HOURS		3.9		6.3		0.0	
2. DIRECT LABOR DOLLARS		\$136.5		\$221.1		\$0.0	
3. OVERHEAD		\$177.4		\$287.4		\$0.0	
4. MATERIAL		\$62.8		\$101.7		\$0.0	
5. OTHER DIRECT CHARGES (Specify)		\$7.5		\$12.2		\$0.0	
6. TOTAL ENGINEERING DOLLARS		\$384.2		\$622.4		\$0.0	

- Analysis conducted to reveal correlation between NR Engineering Hours and physical, performance, programmatic characteristics
- Develop estimating relationship used to project NR Engineering hours for a **DIFFERENT** radar.

$$NR\ Engr\ Hrs = \alpha \times (Freq^{\beta_1}) \times (Pwr^{\beta_2}) \times (Sched^{\beta_3})$$

Radar			
Nonrecurring Engineering Hours	Frequency	Power	Schedule
Program A			
B			
C			
D			
E			
G			
H			

# Cost Reporting Forms

- Cost Reporting Forms Example (E4)



# Outline

- Introduction
- **CSDR Training**
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - **Cost Data Collection**
    - Reporting Forms
    - **Validation**
  - Software Resource Data Reports

# Purpose

- Ensure cost reports are compiled correctly and present all required information and data.
  - Comparable (i.e., across programs)
  - Meaningful (i.e., level of detail that provides insight)
  - Transparent (i.e., well defined)
  - Accurate
  - Auditable

# Process

Cost reports are checked for consistency, completeness, and numerical accuracy - *DCARC does not check validity of data in accounting system*

US Defense Contractor  
(Prime or Subcontractor)

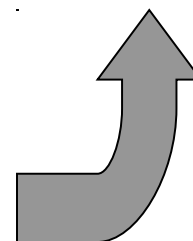
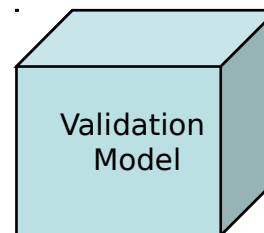


Submittal to OSD DCARC



- PM cost analyst
- DCARC analyst
- Service Cost Center analyst

+



Approved Plan Consistency	Numerical Accuracy	Meta Data Complete	
X	X	X	DD 1921
X	X	X	DD 1921-1 (Front)
X	X	X	DD 1921-1 (Back)

- DD 1921, DD 1921-1 (Front), and DD 1921-1 (Back)



# Report Submissions

- All submissions in Microsoft Excel
- Single file for 1921 *typical*
- Single file for 1921-1 *typical*
  - 1921-1 (Front) use three tabs for each reporting element
    - Total, Recurring, and Nonrecurring
  - 1921-1 (Back) use one tab for each reporting element
- *May have multiple 1921 & 1921-1 file submissions if program has multi-variants of system*

# Attributes of Successful Submissions

- All Meta Data complete
- In accordance with Approved CSDR Contract Plan
  - Reporting Elements
  - Report types
  - Submitted on time
- Complete data entry per Data Item Description Documents (DIDs)
- Use Remarks section to provide additional information useful to amplify the data

*When in doubt, refer to 5000.4M-1, Data Item Description, or call DCARC (703-601-4850)*

# CCDR Acceptance/Rejection

## ACCEPTING CCDRS

- DCARC prepares an acceptance memo and sends it to the program office and copy to contractor
- Soon after the analysts accept the reports, the CCDRs are loaded into the DACIMS database

## REJECTING CCDRS

- DCARC prepares a validation error report and sends it to the program office and copy to contractor
- Program office engages contractor to correct report

# Typical Errors that result in Rejection

- Approved Plan Consistency
  - WBS elements reported  $\neq$  Approved CSDR Plan
  - Not provide all reports
- Numerical Accuracy
  - Parent cost  $\neq$  sum of children cost
  - DD 1921 data  $\neq$  DD1921-1
- Format
  - Use of non-standard reporting formats
  - Functional categories unique to contractor's accounting system
  - Missing or inaccurate meta-data
- Completeness
  - Quantities not reported
  - WBS element codes not reported
  - Functional categories not reported
  - ODC/Other costs not shown separately without remarks

# Consequences of Rejected Reports

- More work by government and contractor
  - Rework by contractor report team
  - Delayed cost data availability for government analysis
    - ***May precipitate special data collection efforts by government analysts to obtain required data***
    - ***Delayed milestone reviews and contract awards***
- Incorrect or incomplete cost reports subject to interpretation and assumptions
  - May lead to improper use and erroneous cost estimating
  - Bad budget development placing program and service at disadvantage
    - ***Over-estimated program budget reduces funds available to other service programs***
    - ***Under-estimated program budget negatively impacts executability***
- May impact PM's DAES rating on cost
  - Continued failure leads to penalties to government PMs, contracts, and programs

# Validation

- Validation Example (E5)



# Outline

- Introduction
- CSDR Training
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - Cost Data Collection
    - Reporting Forms
    - Validation
  - Software Resource Data Reports

# Outline

- SRDR Introduction
- SRDR Planning
- SRDR Reporting
- SRDR Checklists



# What is the SRDR?

- The Software Resource Data Report is a contract data deliverable that formalizes the reporting of software metric data
- It uses a series of customizable form templates (DD 2630) and associated dictionaries to report and define the data.
- SRDR reporting is designed to record both the expectations and actual results of new software developments or upgrades.

# The SRDR: What It's Not

- It's not a device for collection of financial data
- It's not intended as a project management device (it's not designed to 'track' software progress)
- It's not intended to track purchase, licensing, or other ODC costs associated with commercial software or software tools
- It's not supposed to overburden the contractor to report data items that are not part of their standard process



# Why Are SRDRs Needed?

- Software is consuming a larger slice of the development pie
- DoD lacks a centralized repository of data from contemporary software development projects
- Data fields from past database efforts reflected specific parameters from specific SW cost models. Many parameters were not part of contractor's internal metrics sets
- No systematic and standardized process in place to collect software data at project completion

**The SRDR helps close DoD's software data gap**

# How is the SRDR Used?

- Government software cost estimates use projected SW size, growth, and vendor productivity
- Data can be used to calibrate software cost models to a specific software developer environment
- Data collected using SRDRs provide evidence of what actually happened on programs of interest
  - Actual size by application type/language provides the main cost driving information.
  - Size and requirements data at start and finish gives supports estimates size growth risk
  - Effort by activity ensures an “apples to apples” comparison
  - Schedule data provides a sense of projected schedule realism
  - Staffing data provides insight into developer’s resource constraints
  - Defect data can provide some sense of “completeness” (latent deficiencies) to calibrate re-use cost on future programs

**SRDR data improves DoD Software Cost Estimat**

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# SRDR Reporting Requirements

Event	Report Due	Who Provides?	Scope of Report
Pre-Contract (180 days prior to award)	2630-1	Government Program Office	<u>PM's</u> high level estimates of the entire project.
Contract award	2630-2	Contractor	Contractor's estimate of the entire software project.
At start of <u>each</u> build	2630-2	Contractor	Contractor's estimate for the <u>build only</u> .
At end of <u>each</u> build	2630-3	Contractor	Actuals for the <u>build only</u> .
Contract Completion	2630-3	Contractor	Actuals for the <u>entire project</u> .

# SRDR Planning

# SRDR Planning

- The current DoD 5000.4-M-2 requires

*“For all programs, the CWIPT identifies specific data that satisfy the SRDR template and that are meaningful for the subject program. Using this guidance, the government program manager (PM) and the CWIPT develop a customized SRDR together with a set of data definitions and instructions. ...The PM also develops Request For Proposal (RFP) language and a draft Contract Data Requirements List (CDRL). The PM summarizes the elements for which software resource measurement data are desired in a software resources measurement plan. The plan, including the customized SRDR, the data definitions, the draft RFP, CDRL, and DID, are to be provided to prospective developers for comments. The PM and the CWIPT will finalize the plan and submit it to the CAIG Chairman for approval.”*
- Unlike the data elements in CCDRs, the data elements in SRDRs are customized to each contractor

# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
5. Develop customized SRDR and dictionary (How?)
6. Develop draft RFP and CDRL language
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval





# Who Must Submit SRDRs?

- Established via DoD Instruction 5000.2 policy  
*“All major contracts and subcontracts, regardless of contract type, for contractors developing/producing software elements within ACAT I and ACAT IA programs for any software development element with a projected software effort greater than \$25M (FY 2002 constant dollars)”*
- Specific SRDR implementation guidance is provided in DOD 5000.4-M-2



# Who Must Submit SRDRs?

- Prime contractors are required to flow down SRDR requirements to all affected sub-contractors
- Reporting requirement is established on a contract by contract basis, not by individual software element
- All contractors (primes and subs) deliver their SRDR data directly to the government.
- A sub-contractor with software development effort < \$25M can be aggregated into the prime contractor's SRDR. The prime contractor must receive some minimum amount of data from the sub-contractor

Contract or	SW Value	Who Reports?
Prime (+ Sub-Ctr)	<\$25 M	No report required**
	>\$25 M	Prime
Sub-Ctr Only	>\$25 M	Sub-Ctr (Direct report to the Gov't)
	<\$25 M	Data is reflected in the prime's SRDR report

**\*\*Exception:** The CWIPT can require SRDRs for software developments <\$25M if the software is deemed 'high risk'.



# Who Must Submit SRDRs?

- The Resource Distribution Table (RDT) facilitates the process of determining who must submit SRDRs.
- Identify estimated contract SW value for all contracts (including sub-contracts).
- Useful for uncovering cases where a prime and sub each have SW <\$25M, but taken together, they exceed the threshold

Resource Distribution Table

Prime Contractor or Sub-Contractor	Description	CUM TOTAL	CFE				GFE	
			Prime	Subcontractor 1	Subcontractor 2	Subcontractor 3	Prime	Subcontractor n
			Radar	Antenna	Software	Display	Test Set	Diagnostic Elec.
Contractor			RAD-MART	AERIAL INTERNATIONAL	BITS-R-US	Imaging Solutions	ATE Technologies	Faultfinder, Inc.
Address			Springfield, NE	Pottsville, SD	Portland, CT	Kingstown, NM	Frankline, NY	Parsnip, FL
Contract Number			D12345-06-C-7890				T78900-06-C-1234	
Contract Value (Estimated), TY\$M		\$682.0	\$550.0	\$45.0	\$102.0	\$20.0	\$132.0	\$41.0
Software Contract Value (Estimated), TY\$M		\$158.0	\$125.0		\$85.0	\$7.0	\$33.0	\$17.0
Government Organization or PARM			Defense Electronics Command	Defense Electronics Command	Defense Electronics Command	Defense Electronics Command	Defense Test Command	Defense Test Command
CSDR Direct Reporting per CWIPT (Yes/No)			Yes	Yes	Yes	No	Yes	Yes
WBS Element Code	WBS							
	11	12	13	14	15			
1	RADAR SYSTEM							
1.1		PRIME MISSION PRODUCT						
1.1.1			DISPLAY					
1.1.2			RECEIVER/TRANSMITTER					
1.1.3			ANTENNA					
1.1.3.1			PEDESTAL					
1.1.3.1.1			HOUSING					
1.1.3.1.2			PLATFORM					
1.1.3.1.3			GYRO					
1.1.3.2			SAI					
1.1.3.3			WAVEGUIDE					
1.1.4			SOFTWARE					
1.2		SE/PM						
1.3		ST&E						
1.4		TRAINING						
1.5		DATA						
1.6		SUPPORT EQUIPMENT						
1.6.1			TEST & MEASUREMENT EQUIP					
1.6.1.1			MAINTENANCE TEST SET					
1.6.1.1.1			DIAGNOSTIC ELEC					
1.6.1.1.2			DISPLAYS/CONTROLS					
1.6.1.1.3			SOFTWARE					
1.6.1.1.4			RACKS					
1.6.1.2			CALIBRATION GAUGES					
1.6.2			SUPPORT & HANDLING EQUIP					
1.7		SPARES						



# What Constitutes SW Development?

Increment 1

Increment 2

Increment 3

**Consider All Increments**

Total Software

SW Configuration Item #1

SW Configuration Item #2

SW Configuration Item #n

**Consider All Components**

***The Government Uses a Comprehensive Definition***

Total Software Development

System Requirements

System Design

Software Requirements

Preliminary/Detailed Design

Code & Unit Test

Software Integration & Test

System Integration & Test

Certification

Software Program Management

Software Configuration Management

Software Quality Assurance

Data

SW IV&V

Other

Other

Other

**Consider All Activities**

Total Software Prime Ctr (\$50M)

SW Prime Ctr (\$20M)

SW Sub Ctr 1 (\$15M)

SW Sub Ctr 2 (\$15M)

**Consider All Contracts**

# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
5. Develop customized SRDR and dictionary (How?)
6. Develop draft RFP and CDRL language
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval

# Identify Software Data Elements

- What specific data elements are required in the SRDR submission?
- There are four broad areas of data elements
  - Descriptive/context data
  - Software sizing data
  - Software effort data
  - Software schedule data
- All four areas must be addressed in the SRDRs
- One additional area, SW Quality is optional

# Identify Software Data Elements

- The requested data elements should
  - Encompass a small set (no dragnet)
  - Address the needs of the DoD cost analysts
  - Be objective and measurable
  - Align to data and information that a contractor would normally generate and use internally
  - Be sufficiently generic to ensure broad applicability across a variety of software cost estimating tools/approaches
- The DD 2630 form reflects the types of desired data DoD cost analysts need and establishes a **sample template** for reporting software data





# Identify Software Data Elements

## DD2630 Template Page 1 Section 1-Report Context

1. System/Element Name
2. Report As Of
3. Authorizing Vehicle
  - 4a. Reporting Event
  - 4b. Submission #
  - 4c. Supersedes #
5. Name of Development Organization
  - 6a. Certified CMM level or Equivalent
7. Certification Date
8. Lead Evaluator
9. Affiliation
10. Precedents

Software Resources Data Report: Initial Developer Report - Sample			
Due 60 Days After Contract Award and 60 Days After Start of Any Release or Build			
Page 1: Report Context, Project Description and Size			
<b>1. Report Context</b>			
1. System/Element Name (version/release):		2. Report As Of:	
3. Authorizing Vehicle (MOU, contract/amendment, etc.):		4. Reporting Event: <b>Project/Release Start</b> Submission # _____ (Supersedes # _____, if applicable)	
<b>Description of Planned Development Organization</b>			
5. Name of Development Organization:		6. Certified CMM Level (or equivalent):	8. Lead Evaluator:
		7. Certification Date:	9. Affiliation:
10. Precedents (list up to five similar systems by the same organization or team):			
Comments on Part 1 responses:			
<b>2. Product and Development Description</b>			
Percent of Product Size		Planned Development Process	
Upgrade or New?			
1. Primary Application Type:		2. % 3.	
5. Secondary Application Type:		6. % 7.	
9. Third Application Type:		10. % 11.	
13. Fourth Application Type:		14. % 15.	
17. Primary Language (planned):		18. %	
19. Secondary Language (planned):		20. %	
21. List COTS/GOTS Applications Planned:			
22. Peak staff (maximum team size in FTE) expected to work on and charge to this project: _____			
23. Percent personnel expected to be: Highly experienced in domain: ____% Nominally experienced: ____% Entry level, no experience: ____%			
Comments on Part 2 responses:			
<b>3. Product Size Reporting</b>			<b>Estimates at time of Contract Award</b>
1. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Data Dictionary) expected to be satisfied by delivered software product			
2. Number of External Interface Requirements (i.e., not under project control) expected to be satisfied by delivered software product			
Code Size Measures for items 4 through 6. For each, indicate <u>S</u> for physical SLOC (carriage returns); <u>Src</u> for noncomment SLOC only; <u>LS</u> for logical statements; or provide abbreviation _____ and explain in associated Data Dictionary.			
4. Expected amount of New Code to be developed and delivered (Size in _____)			
5. Expected amount of Modified Code to be developed and delivered (Size in _____)			
6. Expected amount of Unmodified, Reused Code to be developed and delivered (Size in _____)			
Comments on Part 3 responses:			



# Identify Software Data Elements

## DD 2630 Template Page 1 Section 2-Product and Development Description

1. Primary Application Type
2. Percent of Product Size
3. Planned Development Process
4. Upgrade or New?
5. Secondary Application Type
6. Percent of Product Size
7. Planned Development Process
8. Upgrade or New?
9. Third Application Type
10. Percent of Product Size
11. Planned Development Process
12. Upgrade or New?
13. Fourth Application Type
14. Percent of Product Size
15. Planned Development Process
16. Upgrade or New?
17. Primary Language
18. Percent of Product Size
19. Secondary Language
20. Percent of Product Size
21. COTS/GOTS Applications Used
22. Peak Staff
23. Personnel Experience

Software Resources Data Report: Initial Developer Report - Sample			
Due 60 Days After Contract Award and 60 Days After Start of Any Release or Build			
Page 1: Report Context, Project Description and Size			
<b>1. Report Context</b>			
1. System/Element Name (version/release):		2. Report As Of:	
3. Authorizing Vehicle (MOU, contract/amendment, etc.):		4. Reporting Event: <b>Project/Release Start</b> Submission # _____ (Supersedes # _____, if applicable)	
<b>Description of Planned Development Organization</b>			
5. Name of Development Organization:	6. Certified CMM Level (or equivalent):	8. Lead Evaluator:	
	7. Certification Date:	9. Affiliation:	
10. Precedents (list up to five similar systems by the same organization or team):			
Comments on Part 1 responses:			
<b>2. Product and Development Description</b>			
Percent of Product Size		Planned Development Process	
Upgrade or New?			
1. Primary Application Type:	2. %	3.	4.
5. Secondary Application Type:	6. %	7.	8.
9. Third Application Type:	10. %	11.	12.
13. Fourth Application Type:	14. %	15.	16.
17. Primary Language (planned):	18. %		
19. Secondary Language (planned):	20. %		
21. List COTS/GOTS Applications Planned:			
22. Peak staff (maximum team size in FTE) expected to work on and charge to this project: _____			
23. Percent personnel expected to be: Highly experienced in domain: ____% Nominally experienced: ____% Entry level, no experience: ____			
Comments on Part 2 responses:			
<b>3. Product Size Reporting</b>			<b>Estimates at time of Contract Award</b>
1. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Data Dictionary) expected to be satisfied by delivered software product			
2. Number of External Interface Requirements (i.e., not under project control) expected to be satisfied by delivered software product			
Code Size Measures for items 4 through 6. For each, indicate <u>S</u> for physical SLOC (carriage returns); <u>Sn</u> for noncomment SLOC only; <u>LS</u> for logical statements; or provide abbreviation _____ and explain in associated Data Dictionary.			
4. Expected amount of New Code to be developed and delivered (Size in _____)			
5. Expected amount of Modified Code to be developed and delivered (Size in _____)			
6. Expected amount of Unmodified, Reused Code to be developed and delivered (Size in _____)			
Comments on Part 3 responses:			



# Identify Software Data Elements

## DD2630 Template Page 1 Section 3-Product Size Reporting

1. Number of Software Requirements (Internal)
  2. Number of External Interface Requirements
  3. Requirements Volatility (2630-3 only)
  4. New Code Developed and Delivered
  5. Modified Code Developed and Delivered
  6. Unmodified, Reused Code Developed and Delivered
- Custom Size Units (Not numbered)

Software Resources Data Report: Initial Developer Report - Sample			
Due 60 Days After Contract Award and 60 Days After Start of Any Release or Build			
Page 1: Report Context, Project Description and Size			
<b>1. Report Context</b>			
1. System/Element Name (version/release):		2. Report As Of:	
3. Authorizing Vehicle (MOU, contract/amendment, etc.):		4. Reporting Event: <b>Project/Release Start</b> Submission # _____ (Supersedes # _____, if applicable)	
<b>Description of Planned Development Organization</b>			
5. Name of Development Organization:		6. Certified CMM Level (or equivalent):	8. Lead Evaluator:
		7. Certification Date:	9. Affiliation:
10. Precedents (list up to five similar systems by the same organization or team):			
Comments on Part 1 responses:			
<b>2. Product and Development Description</b>		<b>Percent of Product Size</b>	<b>Planned Development Process</b>
1. Primary Application Type:		2. %	3. Upgrade or New?
5. Secondary Application Type:		6. %	7. %
9. Third Application Type:		10. %	11. %
13. Fourth Application Type:		14. %	15. %
17. Primary Language (planned):		18. %	
19. Secondary Language (planned):		20. %	
21. List COTS/GOTS Applications Planned:			
22. Peak staff (maximum team size in FTE) expected to work on and charge to this project: _____			
23. Percent personnel expected to be: Highly experienced in domain: ____% Nominally experienced: ____% Entry level, no experience: ____%			
Comments on Part 2 responses:			
<b>3. Product Size Reporting</b>			<b>Estimates at time of Contract Award</b>
1. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Data Dictionary) expected to be satisfied by delivered software product			
2. Number of External Interface Requirements (i.e., not under project control) expected to be satisfied by delivered software product			
Code Size Measures for items 4 through 6. For each, indicate <u>S</u> for physical SLOC (carriage returns); <u>Src</u> for noncomment SLOC only; <u>LS</u> for logical statements; or provide abbreviation _____ and explain in associated Data Dictionary.			
4. Expected amount of New Code to be developed and delivered (Size in _____)			
5. Expected amount of Modified Code to be developed and delivered (Size in _____)			
6. Expected amount of Unmodified, Reused Code to be developed and delivered (Size in _____)			
Comments on Part 3 responses:			



# Identify Software Data Elements

## DD2630 Template Page 2

### Section 4-Resource and Schedule Reporting

1. Software Requirements Analysis
2. Software Architecture and Detailed Design
3. Software Coding and Unit Testing
4. Software Integration and System/Software Integration
5. Software Qualification Testing
6. Software Developmental Test and Evaluation
7. Other Direct Engineering Development

Software Resources Data Report: Final Developer Report - Sample			
Page 2: Project Resources, Schedule and Quality			
<b>4. Resource and Schedule Reporting</b>		<b>Provide Actuals at Final Delivery</b>	
Counting from month 1 at contract award, provide Actual Start and End Month for each activity shown. Provide the Actual Total Labor Hours for each activity shown.		Start Month	End Month
		Total Hours	
The following seven items should account for all direct hours charged to the software development project (use item 7 for any direct hours not accounted for in items 1 through 6). Explain any contribution of indirect hours in the associated Data Dictionary.			
1. Software Requirements Analysis			
2. Software Architecture and Detailed Design			
3. Software Coding and Unit Testing			
4. Software Integration and System/Software Integration			
5. Software Qualification Testing			
6. Software Developmental Test and Evaluation			
7. All Other Direct Software Engineering Development Effort (Describe: _____)		Report hours only:	
Comments on Part 4 responses:			
<b>5. Product Quality Reporting (optional)</b>			
One of the following items should be completed as a report on the reliability of the developed system.			
2a. Measured or computed Mean Time to Serious or Critical Defect (MTTD) at Delivery. Provide the specific definition of this measure in the associated Data Dictionary.		_____ hours	
2b. Alternatively, use analogy to compare the observed or computed reliability of this system with the nominal reliability for similar systems. Use the associated Data Dictionary to provide details about the analogous systems and any definitions of reliability used in this response.			
Comments on Part 5 responses:			
Filename and Revision Date of Applicable Software Resources Data Report Data Dictionary:			
Name of person to be Contacted	Signature	Telephone Number	E-Mail
			Date

DD Form 2630-3

Page 2 of 2



# Identify Software Data Elements

## DD2630 Template Page 2 Section 5-Product Quality

- 2a. Mean Time to Serious or Mission Critical Defect (MTTD)**
- 2b. Analogous reliability**

- 1. This Section is not applicable for initial reporting (2630-2)***
- 2. Product Quality Reporting is considered an optional reporting item. This item is included based on the recommendation of the CWIPT.***

Software Resources Data Report: Final Developer Report - Sample			
Page 2: Project Resources, Schedule and Quality			
4. Resource and Schedule Reporting		Provide Actuals at Final Delivery	
Counting from month 1 at contract award, provide Actual Start and End Month for each activity shown. Provide the Actual Total Labor Hours for each activity shown.		Start Month	End Month
		Total Hours	
The following seven items should account for all direct hours charged to the software development project (use item 7 for any direct hours not accounted for in items 1 through 6). Explain any contribution of indirect hours in the associated Data Dictionary.			
1. Software Requirements Analysis			
2. Software Architecture and Detailed Design			
3. Software Coding and Unit Testing			
4. Software Integration and System/Software Integration			
5. Software Qualification Testing			
6. Software Developmental Test and Evaluation			
7. All Other Direct Software Engineering Development Effort (Describe: _____)		Report hours only:	
Comments on Part 4 responses:			
5. Product Quality Reporting (optional)			
One of the following items should be completed as a report on the reliability of the developed system.			
2a. Measured or computed Mean Time to Serious or Critical Defect (MTTD) at Delivery. Provide the specific definition of this measure in the associated Data Dictionary.		_____ hours	
2b. Alternatively, use analogy to compare the observed or computed reliability of this system with the nominal reliability for similar systems. Use the associated Data Dictionary to provide details about the analogous systems and any definitions of reliability used in this response.			
Comments on Part 5 responses:			
Filename and Revision Date of Applicable Software Resources Data Report Data Dictionary:			
Name of person to be Contacted	Signature	Telephone Number	E-Mail
			Date

# Identify Software Data Elements

- It is the CWIPT's responsibility to tailor the SRDR data items
- While tailoring the SRDR, the CWIPT should
  - Align data fields directly to contractor's in-house SW metrics and accounting system
  - Reflect any preexisting knowledge of the software components that comprise the system (especially if the program is considered an upgrade development)
  - Determine which contractors shall report lower level details (i.e. CSCI level detail)



# An Example of Tailoring

## Original 2630 Form

3. Product Size Reporting	Estimates at time of Contract Award
1. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Data Dictionary) expected to be satisfied by delivered software product	
2. Number of External Interface Requirements (i.e., not under project control) expected to be satisfied by delivered software product	
Code Size Measures for items 4 through 6. For each, indicate <u>LS</u> for physical SLOC only; <u>LS</u> for logical statements; or provide abbreviation _____	
4. Expected amount of New Code to be developed and delivered (Size in _____)	
5. Expected amount of Modified Code to be developed and delivered (Size in _____)	
<del>6. Expected amount of Unmodified, Reused Code to be developed and delivered (Size in _____)</del>	
Comments on Part 3 responses:	

DD Form 2630-2

***This contractor does not use the metric 'Unmodified SLOC'. Instead, it has five additional categories of SLOC that are tracked. Therefore its SRDR form is tailored to track to its internal metrics.***

## Tailored Form

3. Product Size Reporting	Estimates at time of Contract Award
1. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Data Dictionary) expected to be satisfied by delivered software product	
2. Number of External Interface Requirements (i.e., not under project control) expected to be satisfied by delivered software product	
Code Size Measures for items 4 through 6. For each, indicate <u>LS</u> for physical SLOC (carriage returns); <u>NSC</u> for noncomment SLOC only; <u>LS</u> for logical statements; or provide abbreviation _____ and explain in associated Data Dictionary.	
4. Expected amount of New Code to be developed and delivered (Size in _____)	
5. Expected amount of Modified Code to be developed and delivered (Size in _____)	
6. Expected amount of <b>Translated</b> Code to be developed and delivered (Size in _____)	
7. Expected amount of <b>Ported</b> Code to be developed and delivered (Size in _____)	
8. Expected amount of <b>External Reused</b> Code to be developed and delivered (Size in _____)	
9. Expected amount of <b>Internal Reused</b> Code to be developed and delivered (Size in _____)	
10. Expected amount of <b>Legacy Reused</b> Code to be developed and delivered (Size in _____)	
Comments on Part 3 responses:	

DD Form 2630-2

# Precautions When Tailoring

- Equivalent New Source Lines of Code (ESLOC) and Delivered Source Lines of Code (DSLOC) are not valid as primary SRDR sizing metrics
  - ESLOC reflects a weighted sum *computation* and is not a measurement
  - Neither DSLOC nor ESLOC distinguish new development from reuse
  - Both can be provided as *supplemental* information
- Alternative sizing metrics (such as Function Points) in lieu of SLOC are permitted
  - Must provide a clear definition in the dictionary
  - Must be used on both the 2630-2 and 2630-3 (i.e. Cannot use alternative metric on 2630-2 and then revert to SLOC on 2630-3)
  - Should allow independent verification of the project size by examining the software products produced by the development.
- Auto-generated New/Modified Code
  - Exhibits very high productivity as compared to hand-generated code
  - Should be identified separately from hand-generated new/modified



# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
5. Develop customized SRDR dictionary (How?)
6. Develop draft RFP and CDRL language
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval



# Identify System Components to Report

- What elements within the system contain software?
- Software exists throughout the system
  - Embedded software within prime mission equipment
  - Applications running on general purpose computers
  - Mission simulator software within training equipment
  - Support software such as mission planning
  - Specialized test software such as SIM/STIM
- For every appropriate element identified, it must ultimately be reported in the SRDR



# Identify System Components to Report

COST AND SOFTWARE DATA REPORTING PLAN										Form Approved OMB No. 0704-0188					
1a. PROGRAM <b>Mountain DEW</b>			2a. WEAPON SYSTEM TYPE <b>Unmanned Aerial Vehicle</b>		3. SUBMISSION TYPE <input checked="" type="checkbox"/> INITIAL SUBMISSION <input type="checkbox"/> CHANGE		4. DATE AS OF (MM/DD/YY) <b>4/1/2005</b>		5. REPORT DATE (MM/DD/YY) <b>4/1/2005</b>						
1b. MILESTONE A: <input type="checkbox"/> B: <input checked="" type="checkbox"/> C: LRIP <input type="checkbox"/> C: PROD <input type="checkbox"/>			6a. TELEPHONE NUMBER (include area code) <b>323-233-6756</b>		7. WAS <input type="checkbox"/> PROGRAM <input checked="" type="checkbox"/> CONTRACT		8. PREPARING ORGANIZATION <b>Mountain DEW Joint Program Office</b>								
6. POINT OF CONTACT (POC) INFORMATION a. POC AND ADDRESS (Include ZIP Code) <b>F. Binight-UAV Inc. 56 Runway Road Los Angeles, CA 90003</b>			6b. FAX NUMBER (include area code) <b>323-967-6510</b>		6c. E-MAIL: <b>fbinight@uavinc.com</b>		9. REVIEW AND REFERENCE NUMBER								
10. WBS ELEMENT CODE a. PROGRAM b. CONTRACT		11. WBS REPORTING ELEMENTS		12. CONTRACTOR (DUNS Code) <b>UAV Inc</b>		13. CONTRACT NUMBER		14. REPORT FREQUENCY							
								a. DD 1921 REQUIRED		b. DD 1921-1 (Part I) REQUIRED		c. DD 1921-1 (Part II) REQUIRED		d. DD 2630 REQUIRED	
1.0		Unmanned Aerial Vehicle						X		X					
1.1		Air Vehicle						X		X					
1.1.1		Airframe						X		X					
1.1.2		Propulsion						X		X					
1.1.3		AV Applications Software						X		X					
1.1.4		AV System Software						X		X					
1.1.5		Communications/Identification						X		X					
1.1.5.1		Communications/Identification-Hardware						X		X					
1.1.5.2		Communications/Identification-Software						X		X					
1.1.6		Navigation/Guidance						X		X					
1.1.6.1		Navigation/Guidance-Hardware						X		X					
1.1.6.2		Navigation/Guidance-Software						X		X					
1.1.7		Central Computer						X		X					
1.1.8		Automatic Flight Control						X		X					
1.1.8.1		Automatic Flight Control-Hardware						X		X					
1.1.8.2		Automatic Flight Control-Software						X		X					
1.1.9		Integration, Assembly, Test and Checkout						X		X					
1.2		Payload						X		X		X			
1.3		Ground Segment						X		X					
1.3.1		Ground Control						X		X					
1.3.1.1		Ground Control-Hardware						X		X					
1.3.1.2		Ground Control-Software						X		X					
1.3.2		Launch & Recovery						X		X					
1.3.2.1		Launch & Recovery-Hardware						X		X					
1.3.2.2		Launch & Recovery-Software						X		X					
1.3.3		Transport Vehicles						X		X					
1.3.4		Transport Storage Containers						X		X					
1.3.5		Auxiliary Ground Equipment						X		X					
1.4		Systems Engineering/ Program Management						X							
1.5		System Test and Evaluation						X							
1.5.1		Development Test and Evaluation						X							
1.5.2		Operational Test and Evaluation						X							
1.5.3		Mock-ups						X							
1.5.4		Test and Evaluation Support						X							
1.5.5		Test Facilities						X							
1.6		Training						X							

**SRDR reporting requirements are specified in Box 14d of Cost and software Data Reporting Plan (DD 2794).**

**Initial SW Reporting Req't's are identified by the CWIPT on the Program Plan and elaborated on the Contract Plan.**

**Rule of Thumb: If it's got 'SLOC', put an 'X' in the 2630 block**

**COST AND SOFTWARE DATA REPORTING PLAN**

Public reporting burden for this collection of information is estimated to average 15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204 Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provisions of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1a. PROGRAM <b>Mountain DEW</b>		2a. WEAPON SYSTEM TYPE <b>Unmanned Aerial Vehicle</b>		3. SUBMISSION TYPE <input checked="" type="checkbox"/> INITIAL SUBMISSION <input type="checkbox"/> CHANGE		4. DATE AS OF (MM/DD/YY) <b>4/1/2005</b>		5. REPORT DATE (MM/DD/YY) <b>4/1/2005</b>	
1b. MILESTONE A <input type="checkbox"/> B <input checked="" type="checkbox"/> C: LRIP <input type="checkbox"/> C: PROD <input type="checkbox"/>									
6. POINT OF CONTACT (POC) INFORMATION a. POC AND ADDRESS (Include ZIP Code) <b>F. Binight-UAV Inc. 56 Runway Road Los Angeles, CA 90003</b>		6b. TELEPHONE NUMBER (include area code) <b>323-233-6756</b> 6c. FAX NUMBER (include area code) <b>323-967-6510</b> 6d. E-MAIL: <b>fbinight@uavinc.com</b>		7. WBS <input type="checkbox"/> PROGRAM  <input checked="" type="checkbox"/> CONTRACT		8. PREPARING ORGANIZATION <b>Mountain DEW Joint Program Office</b>			
10. WBS ELEMENT CODE a. PROGRAM b. CONTRACT		11. WBS REPORTING ELEMENTS		12. CONTRACTOR (DUNS Code) UAV Inc		13. CONTRACT NUMBER		14. REPORT FREQUENCY a. DD 1921 b. DD 1921-1 (Part I) c. DD 1921-1 (Part II) d. DD 2630	
						REQUIRED		REQUIRED	
1.0		Unmanned Aerial Vehicle				X		X	
1.1		Air Vehicle				X		X	
1.1.1		Airframe				X		X	
1.1.2		Propulsion				X		X	
1.1.3		AV Applications Software				X		X	
1.1.4		AV System Software				X		X	
1.1.5		Communications/Identification				X		X	
1.1.5.1		Communications/Identification-Hardware				X		X	
1.1.5.2		Communications/Identification-Software				X		X	
1.1.6		Navigation/Guidance				X		X	
1.1.6.1		Navigation/Guidance-Hardware				X		X	
1.1.6.2		Navigation/Guidance-Software				X		X	
1.1.7		Central Computer				X		X	
1.1.8		Automatic Flight Control				X		X	
1.1.8.1		Automatic Flight Control-Hardware				X		X	
1.1.8.2		Automatic Flight Control-Software				X		X	
1.1.9		Integration, Assembly, Test and Checkout				X		X	
1.2		Payload				X		X	
1.3		Ground Segment				X		X	
1.3.1		Ground Control				X		X	
1.3.1.1		Ground Control-Hardware				X		X	
1.3.1.2		Ground Control-Software				X		X	
1.3.2		Launch & Recovery				X		X	
1.3.2.1		Launch & Recovery-Hardware				X		X	
1.3.2.2		Launch & Recovery-Software				X		X	
1.3.3		Transport Vehicles				X		X	
1.3.4		Transport Storage Containers				X		X	
1.3.5		Auxilliary Ground Equipment				X		X	
1.4		Systems Engineering/ Program Management				X		X	
1.5		System Test and Evaluation				X		X	
1.5.1		Development Test and Evaluation				X		X	
1.5.2		Operational Test and Evaluation				X		X	
1.5.3		Mock-ups				X		X	
1.5.4		Test and Evaluation Support				X		X	
1.5.5		Test Facilities				X		X	
1.6		Training				X		X	



# Identify System Components to Report

- Do's and Don'ts
  - Do identify all elements requiring software development (even if the development is performed by a sub-contractor)
  - Don't place x's on non-software products such as integration or systems engineering
  - Don't omit reporting because a software element fails to exceed \$25M. The overall SRDR requirement is established at the contract level.

# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize software data elements (What?)
3. Identify system components to report (Where?)
- 4. Identify reporting events (When?)**
5. Develop customized SRDR dictionary (How?)
6. Develop draft RFP and CDRL language
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval



# Identify Reporting Events

- SRDR reporting is required for two types of events
  - Contract Event: SRDR is required at contract start (2630-2) and at contract completion (2630-3)
  - Product Event: SRDR is required at start of a product 'increment' (2630-2) and at completion of product 'increment' (2630-3)
- Reporting events are specified in Box 15 of the *Contract Plan* (DD 2794).
- Do not include the Initial Gov't Report (2630-1) on the contract plan. The 2630-1 is prepared by the program office and is identified on the *program plan*.

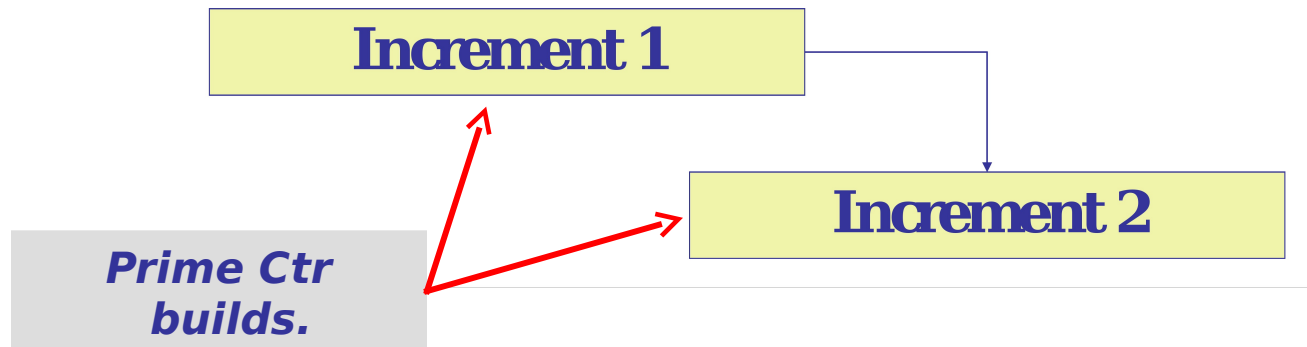


# Identify Reporting Events

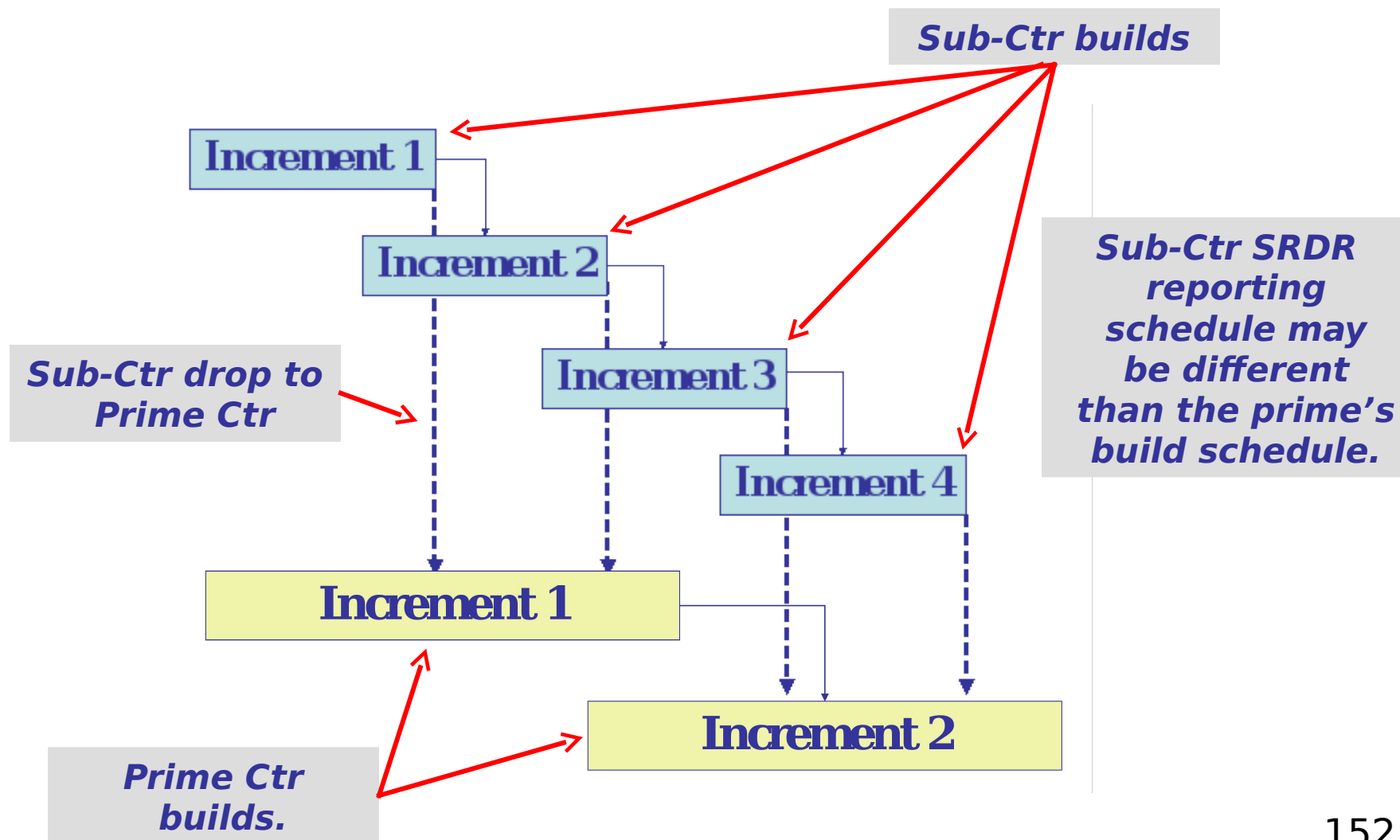
- What is the definition of an 'increment'?
  - A partial delivery of a product capability
  - Sometimes referred to as *spiral*, *increment*, *build*, *release*, *etc*
  - It is not intended to be used for tracking the contractor's internal engineering builds which generally consist of many builds
- For sub-contractors, an increment could be defined as a partial delivery of product to the prime contractor (possibly on a build schedule different than the prime's build schedule)
- **These definitions should be clearly defined and agreed upon by the CWIPT and included in the SRDR dictionary**



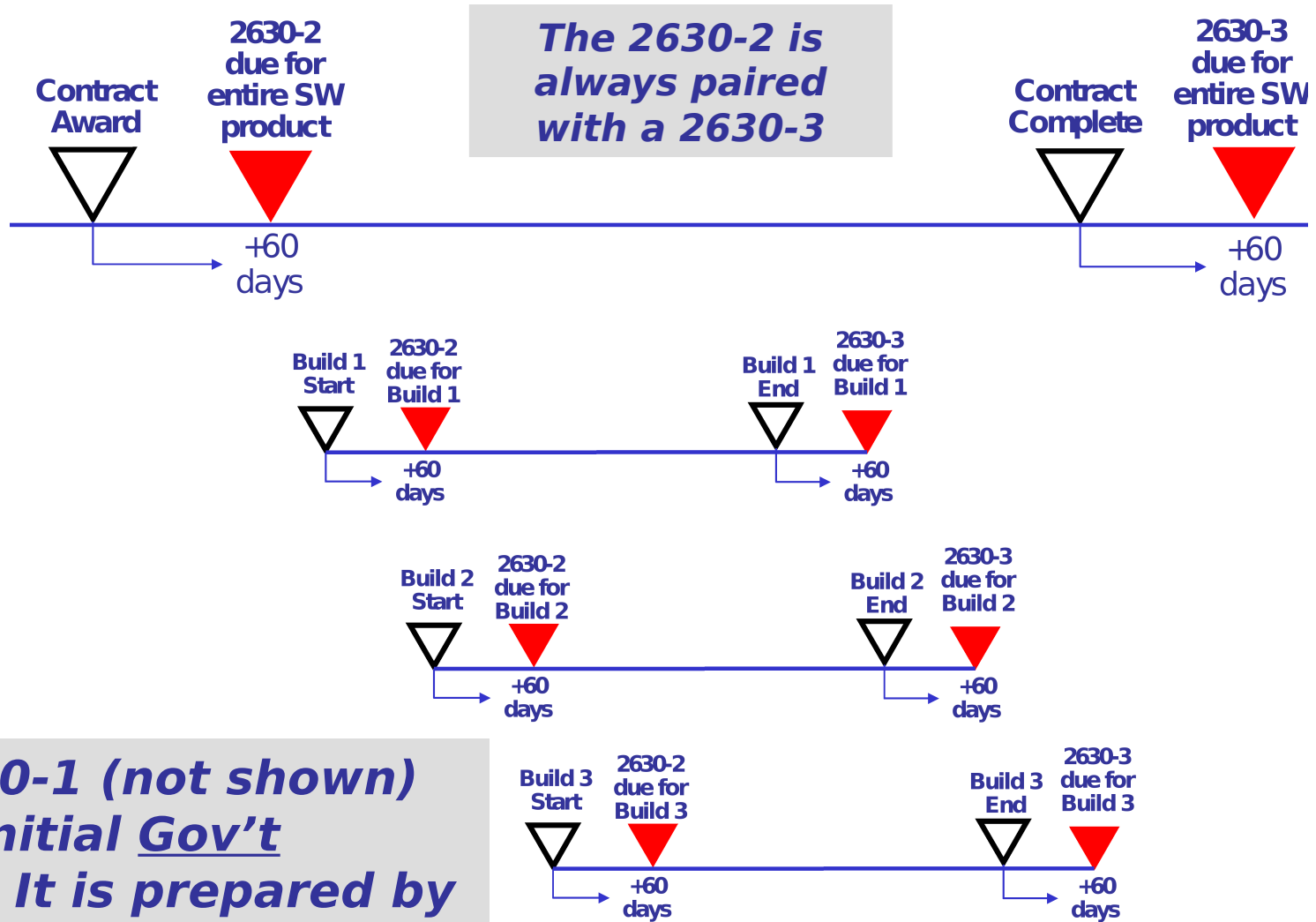
# What is an Increment?



# What is an Increment?



# Identify Reporting Events



*The 2630-1 (not shown) is the Initial Gov't Report. It is prepared by the program office and is due 180 days prior to*



# Identify Reporting Events

15 CCDR SUBMISSION				
15a. SUBMISSION	15B. FORM	15C. EVENT	15D. AS OF DATE	15e. DUE DATE
1	1921, 1921-1 Part 1	UAV Inc Initial Report (Contract Awd 6/1/2006)	9/30/2006	11/29/2006
2	1921, 1921-1 Part 1	UAV Inc Interim Report (CDR 7/1/2008)	1/1/2008	3/1/2008
3	1921, 1921-1 Part 1	UAV Inc Final Report	5/5/2010	7/4/2010
4	2630-2	UAV Inc Initial Report (Contract Awd 6/1/2006)	6/1/2006	7/31/2006
5	2630-2	UAV Inc Initial Report (Inc 1 7/1/2006)	7/1/2006	8/30/2006
6	2630-3	UAV Inc Final Report (Inc 1 8/1/2007)	8/1/2007	9/30/2007
7	2630-2	UAV Inc Initial Report (Inc 2 1/1/2007)	1/1/2007	3/2/2007
8	2630-3	UAV Inc Final Report (Inc 2 10/1/2009)	10/1/2009	11/30/2009
9	2630-3	UAV Inc Final Report (Contract Complete)	5/5/2010	7/4/2010

***The 2630-2 is  
always paired  
with a 2630-3***

- ***Report a 2630-2 and 2630-3 for the entire contract.***
- ***Report a 2630-2 and 2630-3 for each individual software increment/release/build.***
- ***Contracts with only one increment/release/build need only to report a 2630-2 and 2630-3 once for the entire contract.***

# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
- 5. Develop customized SRDR dictionary (How?)**
6. Develop draft RFP and CDRL language
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval



# Develop SRDR Dictionary

- The SRDR dictionary is an integral part of the SRDR submission
- Any submission of a report in the DD Form 2630 series must be accompanied by an explanatory document, known as a SRDR Data Dictionary, which explains data definitions and any details required to correctly interpret the responses
- Failure to submit an adequate dictionary will result in a rejection of the entire SRDR submission.

# Develop SRDR Dictionary

- The intent of the dictionary is twofold
  - For the user of the data (government cost analysts), the dictionary provides overall context of the system and development and it facilitates interpretation of the data.
  - For the data provider, the dictionary precisely defines each of the elements provided and establish the rules necessary to collect and report the information.
- The dictionary can be a separate document file or it can be embedded within the SRDR itself (example: A separate dictionary tab within an SRDR Excel file)



# Develop SRDR Dictionary

- The SRDR Manual (DoD 5000.4-M-2) contains a sample data dictionary that defines all data fields within the 2630 template
- Consider the sample as a point of departure for tailoring to the contractor's accounting and metric systems.
- Examples of areas to tailor:
  - Counting SLOC
  - SLOC Categories (i.e. New, Mod, Reused, etc)
  - Rules used to classify LOC into SLOC categories
  - Company standard classification (and definitions) of discrete SW development activities
  - Breakdown and tallying of requirements counts
  - Identification and tallying of interface counts
  - etc



# Dictionary Example

## From SRDR Manual

### 4. New Code

~~Most software projects utilize a combination of new, reused, and generated code to accomplish the required function. Any code that was developed specifically for this project, or was reused or generated by tools but then extensively modified (more than 25% of the lines changed or added), is considered new code. Code generator inputs prepared by hand, such as tables or scripts, are also counted as new code.~~

### 5. Modified Code

~~Source code that was generated by tools or obtained from outside the project (even if within the same organization) and was then reused with minor modifications (less than 25% modified) by this project is reported under this item. If modifications were substantial (more than a notional 25%), the code is counted as new (item 4). This assessment should be done at the code unit level and not across the whole project.~~

### 6. Reused Code

~~Source code that was obtained from outside the project (even if within the same organization) or that was generated by tools and not modified at all is reported under item 6.~~

***Use definitions from the contractor's internal metrics system.***

## Customized Dictionary

### 4. New Code

Any source code file that was developed specifically for this project, or was reused or generated by tools but then extensively modified (more than 30% of the lines changed or added), is considered new code. Code generator inputs prepared by hand, such as tables or scripts, are also counted as new code.

### 5. Modified Code

Source code that was generated by tools or obtained from outside the project (even if within the same organization) and was then reused with minor modifications (less than 30% modified) by this project is reported under this item. If modifications were substantial (more than a notional 30%), the code is counted as new (item 4). This assessment should be done at the code unit level and not across the whole project.

### 6. Translated Code

Source code that was obtained from outside the project (even if within the same organization) that required translation from its existing programming language to a new programming language (for example from Ada to C++).

### 7. Ported Code

Source code that was obtained from outside the project (even if within the same organization) that required adaptation to allow the use of a different computer processor and/or a different operating system. (Example from PC/WinXP to Apple/MAC OS)

### 8. External Reused Code

Source code that was obtained from outside the developer that did not require any substantial modification or adaptation effort.

# SRDR Dictionary-Cont'd

Dictionary should also address

- Which measures are tracked cumulatively versus discretely
- Measuring schedule length of an activity
  - Does an activity end when no add'l hours are charged to that activity or
  - Does the activity end upon meeting exit criteria (i.e. successful deliverable)
- Definition of Build Start/End

<b>At contract award (2630-2)</b>	<b>Provide estimates of the entire completed project at the level of detail agreed upon. Measures should reflect cumulative grand totals.</b>
<b>At start of a build (2630-2)</b>	<b>Provide estimates at completion for the <u>build only</u>. Measures such as size, effort, and schedules should reflect build only. Other metrics such as requirement counts, interface counts may reflect current cumulative estimate at completion.</b>
<b>At end of a build (2630-3)</b>	<b>Provide actuals for the <u>build only</u>. Measures such as size, effort, and schedules should reflect build only. Other metrics such as requirement counts, interface counts may reflect current cumulative actuals.</b>
<b>At end of contract (2630-3)</b>	<b>Provide actuals for the <u>entire contract</u>.</b>

# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
5. Develop customized SRDR dictionary (How?)
- 6. Develop draft RFP and CDRL language**
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval



# Draft RFP and CDRL Language

- RFP and DID language included in DoD 5000.4-M-2. CDRL can be found on the DCARC website.

## RFP Language for Section M, Evaluation.

### RFP Language for Section L, Instructions:

The government desires software measurement data on the elements identified within the attached Work Breakdown Structure. The data desired for each marked element are contained on the attached sample DD Form 2630 forms (SRDR) and associated definitions and instructions. The government desires to collect a subset of the same data that the contractor normally collects to oversee and manage software development efforts. Therefore, the government expects the contractor to customize or tailor the draft DD Form 2630 forms to be consistent with data it normally collects. The contractor shall propose the software measurement data within a Software Resources Data Collection Plan, which may be part of either a Software Development Plan or a separate Software Measurement Plan. The contractor shall provide a SRDR Data Dictionary with the customized DD Form 2630 forms. The contractor shall submit a completed DD Form 2630-2 within 60 days after contract award for the entire software product, and within 60 days after initiation of each software release or build. The contractor shall submit a completed DD Form 2630-3 within 120 days of delivery of each delivered software release. The contractor shall submit a completed DD Form 2630-3 for the entire software product within 120 days of delivery of the final software element. Report format and other delivery requirements are specified in the attached CDRL.

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)										Form Approved OMB No. 0704-0168	
<small>The public reporting burden for this collection of information is estimated to average 15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering the data needed, reviewing the collection of information, completing and reviewing the collection of information, and sending the collection of information to the Department of Defense. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0182), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any notations that may appear hereon that support collection of information may be mandatory under certain provisions of law, the collection of information is not mandatory if it does not have a label that includes this statement.</small>											
A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY:		D. OTHER					
1. SYSTEM/ITEM		E. CONTRACT/PR NO.		F. CONTRACTOR							
1. DATA ITEM NO.		2. TITLE OF DATA ITEM		3. SUBTITLE		4. AUTHORITY (Cite applicable law or regulation)		5. CONTRACT REFERENCE		6. REQUIRING OFFICE	
Software Resources Data Report: Initial Developer Report (DD Form 2630-2)		Software Resources Data Reporting (SRDR)		Software Resources Data Reporting (SRDR)		Not applicable		Provided by the contractor		DD Form 2630-2	
7. DD FORM 2630 REQ. LT		8. DD FORM 2630 REQ. E		9. FREQUENCY		10. DATE OF FIRST SUBMISSION		11. DATE OF SUBSEQUENT SUBMISSION		12. DISTRIBUTION	
Not applicable		Not applicable		Not applicable		See Block 16		See Block 16		a. ADDRESS b. COPIES	
										Dist. Rep. Orig.	
13. REMARKS											
Prepare submissions in accordance with the contract, proposed tailoring of the DD Form 2630 series of forms (SRDRs), and the Cost and Software Data Reporting (CSDR) Manual (DoD 5000.4-M-1).											
Block 11 - 60 days after contract award - 60 days after start of each software release											
Block 12 - 60 days after contract award											
Block 13 - 60 days after start of each software release											
Block 14 - SRDR shall be prepared in Microsoft Excel workbook/worksheet-readable format.											
Distribution: Submit electronically in accordance with the detailed instructions contained in the Data Item Description. All SRDR-related forms must be electronically forwarded to the DCARC Web site at <a href="http://dcarc.pae.osd.mil">http://dcarc.pae.osd.mil</a> .											
15. TOTAL 0 0 0											
G. PREPARED BY		H. DATE		I. APPROVED BY		J. DATE					

DD FORM 1423-1, FEB 2001 PREVIOUS EDITION MAY BE USED. Page of Pages

Reset

Title: Software Resources Data Report: Initial Developer Report (DD Form 2630-3)  
Number:                       
Approval Date: Draft  
AMSC Number:                       
DTIC Applicable: No  
Limitation:                       
GIDEP Applicable: No

### Office of Primary Responsibility: (D)OSD/PA&E/CAIG

Applicable Forms: Sample Software Resources Data Report: Initial Developer Report (DD Form 2630-2).

**Use/relationship:** The DD Form 2630-2 is used to obtain the expected (estimates-at-complete) characteristics of a software product and its development process. These data will be used to compile a database of software product sizes, schedules, effort, and quality that government analysts can draw upon to help predict the cost of new systems.

- Information to be acquired through these data will include the developer's estimates of software product size, development schedule, peak staff, and direct labor hours.
- The definitions of the data items are negotiable but must include the three categories of size, schedule, and effort. The contractor must provide a dictionary that defines the data elements contained on the negotiated DD Form 2630-2.
- The definition of the software product is negotiable but should be a named, controlled, testable, and deliverable program, subsystem, or system. A reportable product can be an incremental version, release or full operating capability, whether or not it will complete the overall system or whether or not some requirements will be deferred to a future delivery or upgrade.

The format and specific contents of this report must be tailored to reflect the negotiated data elements, data definitions, and software system definition to enable relevant and low cost data reporting. Applicable programs are all Major Defense Acquisition Programs (MDAP) that contract for (or write an MOU for) more than \$25 million (FY 2002) for software. Subcontracts for more than \$25 million (FY 2002) in software development should be reported on separate DD Form 2630-2 submissions, either by the prime contractor or the directly by the subcontractor. Subcontracts for less than \$25 million (FY 2002) in software development should be included (rolled-up) in the data reported for the prime contract DD Form 2630-2.

### Requirements:

- Reference documents.** Interim guidance DODI 5000 *Defense Acquisition* provides mandatory acquisition procedures for MDAP and MAIS programs (30 October 2002). Attachment 2 of this guidance, *Operation of the Defense Acquisition System*, Tab C (Table 3), summarizes contract reporting requirements. Detailed instructions for preparing the DD Form 2630-2, the Software Product Development Report - Initial, are contained in Chapter 3 of the SRDR Manual, DoD 5000.4-M-2.
- Format.** The DD Form 2630-2 shall be in the format agreed to by the contractor and the Government as specified in the contractor's Software Development or Measurement Plan.
- Content.** The DD Form 2630-2 shall contain estimated software measurement data as described in the contractor's software development plan and software measurement data element dictionary.

# SRDR DID

- Unlike CCDRs, there is no formal SRDR DID, yet
- Currently, the tailored DD 2630 form, along with the customized data dictionary constitute the SRDR data item description for the contract
- A formal SRDR DID has been developed and is currently under review



# SRDR Planning

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2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
5. Develop customized SRDR dictionary (How?)
6. Develop draft RFP and CDRL language
7. Provide to prospective contractors and request comments
8. Finalize package and submit for CAIG Chair approval

# Provide SRDR forms and dictionary to contractors and request comments

- Program office should provide
  - Copy of (tailored) 2630s
  - Copy of (tailored) dictionary
- Contractor should
  - Evaluate 2630s and assess their ability to pull the requested information from their metrics and accounting systems
- Suggestion: Prior to contract award, contractor/PMO perform an SRDR dry-run on a recently completed development project

# SRDR Planning

1. Identify SRDR reporting contractors (Who?)
2. Identify and customize data elements (What?)
3. Identify system components to report (Where?)
4. Identify reporting events (When?)
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# SRDR Planning Package

## CSDR PLAN

Activity	Start Date	End Date	Frequency	Owner	Status
SRDR Planning	10/1/2009	10/1/2009	1	DCARC	Complete
SRDR Submission	10/1/2009	10/1/2009	1	DCARC	Complete
SRDR Data Dictionary	10/1/2009	10/1/2009	1	DCARC	Complete

SRDR SUBMISSION				
SRDR SUBMISSION	SRDR FORM	SRDR EVENT	SRDR DATE	SRDR DATE
1	SRDR, SRDR-1 Part 1	SRDR Inc Initial Report (Contract Award 6/1/2009)	6/1/2009	11/20/2009
2	SRDR, SRDR-1 Part 1	SRDR Inc Initial Report (Contract Award 6/1/2009)	11/20/2009	11/20/2009
3	SRDR, SRDR-1 Part 1	SRDR Inc Initial Report	6/1/2009	11/20/2009
4	SRDR-1	SRDR Inc Initial Report (Contract Award 6/1/2009)	6/1/2009	11/20/2009
5	SRDR-1	SRDR Inc Initial Report (Inc 1 1/1/2009)	1/1/2009	11/20/2009
6	SRDR-1	SRDR Inc Initial Report (Inc 1 1/1/2009)	1/1/2009	11/20/2009
7	SRDR-1	SRDR Inc Initial Report (Inc 2 1/1/2009)	1/1/2009	11/20/2009
8	SRDR-1	SRDR Inc Initial Report (Inc 2 1/1/2009)	1/1/2009	11/20/2009
9	SRDR-1	SRDR Inc Initial Report (Contract Award 6/1/2009)	6/1/2009	11/20/2009

Software Elements

+ Reporting Events

+ Customized Data Elements

+ SRDR Data Dictionary

+ RFP, CDRL, DID

= SW Measurement Plan

# SRDR Reporting



# Our Sample System to Report

- Peace of Mind-1000 (POM-1000)
  - Developed by ACME Home Security Company, a sub-contractor who exceeded the \$25M threshold for SRDR reporting
  - State of the art home security system
  - Integrated monitoring of intrusion, fire, electrical, telephone
  - Automatic lighting system
  - Genuine Saskatchewan sealskin bindings on every window sensor
- ACME has just completed development and has delivered Release 1 of the POM-1000 to the prime contractor.
- What CSDR data is required to be transmitted to DCARC?



# Assumptions

- For simplicity, we'll assume that the CWIPT has determined that the default 2630 template and the default data dictionary within the SRDR manual are sufficient for SRDR data reporting.



# What CSDR Report is Due?

15 CDR SUBMISSION				
15a. SUBMISSION	15b. FORM	15c. EVENT	15d. AS OF DATE	15e. DUE DATE
001	1921, 1921-1, 2630-2	LRIP 1 - Initial	2/28/2008	4/28/2008
002	2630-2	SW Release 1 Start	3/15/2008	5/14/2008
003	2630-3	SW Release 1 Complete	5/31/2008	7/29/2008
004	2630-2	SW Release 2 Start	4/20/2008	6/19/2008
005	2630-3	SW Release 2 Complete	12/31/2008	3/1/2009
006	1921, 1921-1, 2630-3	LRIP 1 - Final	2/28/2009	4/29/2009
007	1921, 1921-1	LRIP 2 (option) - Pre Milestone C Interim	5/4/2009	7/3/2009
008	1921, 1921-1	LRIP 2 (option) - Final	2/28/2010	4/29/2010

## SPECIAL CONTRACTOR INSTRUCTIONS

### DD Forms 2630-2 and 2630-3 guidance:

1. Contractor is permitted to tailor the format of the 2630-2 and 2630-3.
2. The 2630-2 and 2630-3 shall contain all data elements identified and agreed to by the CWIPT and documented within the SW measurement plan.
3. For each software Release, DD Forms 2630-2 and 2630-3 must include the required information for ALL CSCIs developed and / or delivered in the Release. The Release information should be provided for each individual CSCI; please do not aggregate CSCI information.

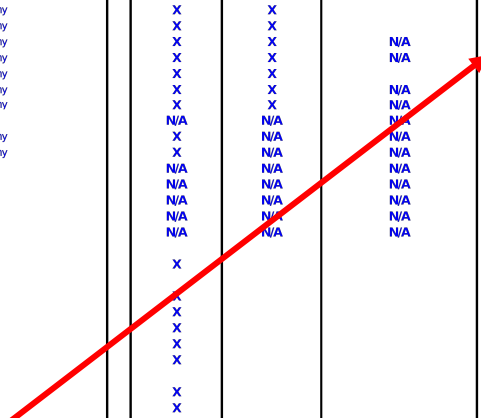
***ACME's CSDR contract plan shows that a Final Developer Report (DD 2630-3) is due within 60 days of completion of Release 1.***



# What Elements Should Be Reported?

Public reporting burden for this collection of information is estimated to average 15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204 Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provisions of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1a. PROGRAM <b>Home Occupancy Unit System for Enlisted (HOUSE)</b>		2a. WEAPON SYSTEM TYPE <b>Electronic/Automated Software System</b>		3. SUBMISSION TYPE <input checked="" type="checkbox"/> INITIAL SUBMISSION <input type="checkbox"/> CHANGE	4. DATE AS OF (MM/DD/YY) <b>3/3/2007</b>	5. REPORT DATE (MM/DD/YY) <b>3/3/2007</b>
1b. MILESTONE A <input type="checkbox"/> B <input type="checkbox"/> C: LRIP <input checked="" type="checkbox"/> C: PROD <input type="checkbox"/>		6b. TELEPHONE NUMBER (include area code) <b>999-123-4567</b>		7. WBS <input type="checkbox"/> PROGRAM <input checked="" type="checkbox"/> CONTRACT		
6. POINT OF CONTACT (POC) INFORMATION a. POC AND ADDRESS (Include ZIP Code) <b>John Appleseed 219 Yellow Brick Road Oz, Kansas 12345</b>		6c. FAX NUMBER (include area code) <b>999-123-4568</b>		8. PREPARING ORGANIZATION <b>USLQC HSPQ</b>		
		6d. E-MAIL: <b>jappleseed@hspq.mil</b>		9. REVIEW AND REFERENCE NUMBER		
10. WBS ELEMENT CODE a. PROGRAM b. CONTRACT		11. WBS REPORTING ELEMENTS		12. CONTRACTOR (DUNS Code)		
				13. CONTRACT NUMBER		
				14. REPORT FREQUENCY		
				a. DD 1921 REQUIRED		
				b. DD 1921-1 (Part I) REQUIRED		
				c. DD 1921-1 (Part II) REQUIRED		
				d. DD 2630 REQUIRED		
1.2.5 1.0 Security Subsystem		ACME Home Security Company		X		
1.2.5 1.1 Peace of Mind-1000 (POM-1000) Home Security System (PMP)		ACME Home Security Company		X		
1.2.5 1.1.1 Burglar Alarm System		ACME Home Security Company		X		
1.2.5 1.1.2 Automatic Lighting System		ACME Home Security Company		X		
1.2.5 1.1.3 Smoke Detectors/Alarms		ACME Home Security Company		X		
1.2.5 1.1.4 Applications Software		ACME Home Security Company		X		
1.2.5 1.1.5 System Software		ACME Home Security Company		X		
1.3 1.1.6 Integration, Assembly, Test, and Checkout		ACME Home Security Company		X		
1.3 1.2 Platform Integration		ACME Home Security Company		X		
1.4 1.3 System Engineering/Program Management		ACME Home Security Company		X		
1.5 1.4 System Test and Evaluation		N/A		N/A		
1.6 1.5 Training		ACME Home Security Company		X		
1.7 1.6 Data		ACME Home Security Company		X		
1.8 1.7 Peculiar Support Equipment		N/A		N/A		
1.9 1.8 Common Support Equipment		N/A		N/A		
1.10 1.9 Operational/Site Activation		N/A		N/A		
1.11 1.10 Industrial Facilities		N/A		N/A		
1.12 1.11 Initial Spares and Repair Parts		N/A		N/A		
TOTAL COST (LESS REPORTING CONTRACTOR'S G&A & PROFIT OR FEE)				X		
REPORTING CONTRACTOR'S G&A				X		
REPORTING CONTRACTOR UNDISTRIBUTED BUDGET				X		
REPORTING CONTRACTOR MANAGEMENT RESERVE				X		
REPORTING CONTRACTOR FCCM				X		
TOTAL COST (LESS REPORTING CONTRACTOR'S PROFIT OR FEE)				X		
REPORTING CONTRACTOR PROFIT OR FEE				X		
TOTAL COST (THROUGH REPORTING CONTRACTOR'S G&A & PROFIT OR FEE)				X		



**The DoD cost analyst will expect to see an SRDR that reflects information for the two elements identified in ACME's CSDR contract plan.**



# What Data Should Be Provided?

Enhancing DoD Cost Analysis

- What are the specific data that should be entered into the SRDR?
- A tailored SW plan was not constructed for this contractor, the SRDR template and its associated data dictionary is (by default) invoked in its entirety on the contract.

Software Resources Data Report: Initial Developer Report - Sample			
Page 1: Report Content, Project Description and Side			
1. Report Content		2. Report As Of	
3. Reporting Vehicle (SOW, contract/instrument, etc.)		4. Reporting Event (Project/Release Start)	
5. Name of Development Organization		6. Submission #	
7. Contract CDR Level (or equivalent)		8. Allocation	
9. Periodicity (Set up to five similar systems for the same organization or team)		10. Comments on Part 1 responses	
11. Product and Development Description		12. Planned Development Process	
13. Primary Application Type		14. Secondary Application Type	
15. Tertiary Application Type		16. Quaternary Application Type	
17. Primary Language (planned)		18. Secondary Language (planned)	
19. LSP/CONTINGENT Applications Planned		20. Peak staff (maximum team size in FTE) expected to work on and charge to this project	
21. Percent personnel expected to be: highly experienced in domain: % Normally experienced: % Entry level, no experience: %		22. Comments on Part 2 responses	
23. Product Size Reporting		24. Estimates at time of contract award	
25. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Contract)		26. Number of External Interface Requirements (i.e., not under project control) expected to be satisfied by delivered software product	
27. Expected amount of New Code to be developed and delivered (Show in _____)		28. Expected amount of Modified Code to be developed and delivered (Show in _____)	
29. Expected amount of Unmodified, Reused Code to be developed and delivered (Show in _____)		30. Comments on Part 3 responses	

Software Resources Data Report: Final Developer Report - Sample			
Page 2: Project Resources, Schedule and Quality			
4. Resource and Schedule Reporting		Provide Actuals at Final Delivery	
5. Counting from month 1 at contract award, provide Actual Start and End Month for each activity shown. Provide the Actual Total Labor Hours for each activity shown.		Start Month	End Month
The following seven items should account for all direct hours charged to the software development project (see Item 7 for any direct hours not accounted for in items 1 through 6). Explain any contribution of indirect hours in the associated Data Dictionary.		Total hours	
1. Software Requirements Analysis			
2. Software Architecture and Detailed Design			
3. Software Coding and Unit Testing			
4. Software Integration and System/Software Integration			
5. Software Qualification Testing			
6. Software Development Test and Evaluation			
7. All Other Direct Software Engineering Development Effort (Describe: _____) Report hours only:			
8. Comments on Part 4 responses			
9. Product Quality Reporting (optional)			
One of the following items should be completed as a report on the reliability of the developed system.			
10. Measured or computed Mean Time to Service or Critical Defect (MTTC) at Delivery. Provide the specific definition of this measure in the associated Data Dictionary. _____ hours			
11. Alternatively, use analogy to compare the observed or computed reliability of this system with the nominal reliability for similar systems. Use the associated Data Dictionary to provide details about the analogous systems and any definition of reliability used in this response.			
12. Comments on Part 5 responses			
Footnote and Revision Date of Applicable Software Resources Data Report Data Dictionary:			
Name of person to be Contacted		Signature	Telephone Number
Date		E-Mail	Date

This is the final developer report form providing actual to build data for each delivery of software (release, version, build, etc.), due within 90 days after each delivery (covering one that deliverable), and at contract completion (covering the entire project). (See following pages.)

DOD 5008.4-14.2  
SOFTWARE RESOURCES DATA REPORT  
(SRDR) MANUAL  
CHAPTER 3. INSTRUCTIONS FOR THE DD FORM 2630 SERIES  
SOFTWARE RESOURCES DATA REPORT (SRDR)

3.1 Introduction

The data in the DD Form 2630 series are used to describe the development or upgrade of a unique software element. The DD Form 2630 series is collectively titled the Software Resources Data Report (SRDR). Any submission of a report in the DD Form 2630 series must be accompanied by an explanatory document, known as a SRDR Data Dictionary, which explains data definitions and clarifies any ambiguity in the interpretation of the response. The described software development or upgrade effort can be the subject of a single software contract, a deliverable release within a single software effort, or a software component of a larger system contract. The software development or upgrade can be performed incrementally or as an integral, complete effort. The DD Form 2630 is designed to record both the expectations and actual results of any software development or upgrade. It is not designed for reporting on, nor should it be used for, software maintenance or software operation and maintenance efforts. Typically, the reporting form should not be used for collecting management tracking measures during the course of a project since the sample data items are not designed to record partial progress or interim results.

This document explains the content of the DD Form 2630 series by describing each data item contained in the sample form shown in Chapter 2. The data items shown on the sample forms are only examples and must be customized to be consistent with data that the development organization actually maintains in its management systems and data in accordance with the approved Software Resources Data Collection Plan, developed by the User Working Integrated Process (UWIP). Thus, the sample forms illustrate but do not mandate the data items needed to satisfy the basic requirements to measure and report software cost, effort, schedule, and productivity quality at the beginning and end of a unique software development or upgrade.

Do not interpret constraints or of restrictions for the sample forms, during the level of detail that would be needed to explain any customized or added data items. As such, the sections of this chapter can be used as a point of departure for a customized progress or interim results.

7. For convenience, the term contract is used in this document to mean the subcontracting vehicle or agreement that describes the software development or upgrade project whether or not it is in the form of a formal contract.

02/02/04

# Additional Ground Rules

- For contract start or increment start, the Initial Developer's Report (2630-2) is used
  - At contract start, the SRDR reflects the contractor's initial estimate of the *entire* software development project.
  - At increment start, the SRDR reflects an (updated) estimate of the increment only
- For contract completion or **increment completion**, the Final Developer's Report (2630-3) is used
  - At contract completion, the SRDR reflects total size, effort, and schedule of the *entire* cumulative project
  - **At increment completion, the SRDR reflects total size, effort and schedule of the increment only**
- This example highlights some very simple tailoring of the DD 2630 form. Additional examples of significant tailoring for more complex projects are provided in DCARC's in-house training course.





# Section 1: Report Context

**UNCLASSIFIED**

SECURITY CLASSIFICATION

**Software Resources Data Report: Final Developer Report**

Due 60 Days After Final Software Delivery and 60 Days After Delivery of Any Release or Build

Page 1: Report Context, Project Description and Size

**1. Report Context**

1. System/Element Name (version/release): <b>Peace of Mind- 1000</b> <b>WBS 1.1.4 Application Software/WBS 1.1.5 System Software</b>		2. Report As Of: <b>5/31/2008</b>
3. Authorizing Vehicle (MOU, contract/amendment, etc.): <b>D12345-06-C-7890</b>		4. Reporting Event: <b>Release 1 End</b> Submission # <b>1</b> (Supersedes # , if applicable)
<b>Description of Actual Development Organization</b>		
5. Development Organization:  <b>ACME Home Security Company</b>	6. Certified CMM Level (or equivalent): <b>4</b> 7. Certification Date: <b>5/1/2005</b>	8. Lead Evaluator: <b>Matt Shurety</b> 9. Affiliation: <b>SPI, Inc</b>
10. Precedents (list up to five similar systems by the same organization or team): <b>POM-500, Smoke Detective-1000, Illumina II</b>		
Comments on Part 1 responses: <b>Report prepared per CSDR contract plan USLQC-03-C-C1</b>		



# Section 1: Report Context

**UNCLASSIFIED**

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**Software Resources Data Report: Final Developer Report**

Due 60 Days After Final Software Delivery and 60 Days After Delivery of Any Release or Build

Page 1: Report Context, Project Description and Size

**1. Report Context**

1. System/Element Name (version/release): **Peace of Mind- 1000**  
**WBS 1.1.4 Application Software/WBS 1.1.5 System Software**

2. Report As Of: **5/31/2008**

3. Authorizing Vehicle (MOU, contract/amendment, etc.):

**D12345-06-C-7890**

4. Reporting Event: **Release 1 End**

Submission # **1**

(Supersedes # , if applicable)

**Description of Actual Development Organization**

5. Development Organization:

**ACME Home Security Company**

6. Certified CMM Level  
(or equivalent): **4**

7. Certification Date: **5/1/2005**

8. Lead Evaluator: **Matt Shurety**

9. Affiliation: **SPI, Inc**

10. Precedents (list up to five similar systems by the same organization or team):

**POM-500, Smoke Detective-1000, Illumina II**

Comments on Part 1 responses: **Report prepared per CSDR contract plan USLQC-03-C-C1**

*The Element Name  
should track to the CSDR  
plan.*



# Section 1: Report Context

**UNCLASSIFIED**

SECURITY CLASSIFICATION

**Software Resources Data Report: Final Developer Report**

Due 60 Days After Final Software Delivery and 60 Days After Delivery of Any Release or Build

Page 1: Report Context, Project Description and Size

**1. Report Context**

1. System/Element Name (version/release): **Peace of Mind- 1000**  
**WBS 1.1.4 Application Software/WBS 1.1.5 System Software**

2. Report As Of: **5/31/2008**

3. Authorizing Vehicle (MOU, contract/amendment, etc.):  
**D12345-06-C-7890**

4. Reporting Event: **Release 1 End**  
Submission # **1**  
(Supersedes # , if applicable)

**Description of Actual Development Organization**

5. Development Organization:

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6. Certified CMM Level  
(or equivalent): **4**

7. Certification Date: **5/1/2005**

8. Lead Evaluator: **Matt Shurety**

9. Affiliation: **SPI, Inc**

10. Precedents (list up to five similar systems by the same organization or team):

**POM-500, Smoke Detective-1000, Illumina II**

Comments on Part 1 responses: **Report prepared per CSDR contract plan USLQC-03-C-C1**

***Report As Of date reflects  
the date of the data. It  
should closely match As of  
date listed in the contract  
plan.***



# Section 1: Report Context

**UNCLASSIFIED**

SECURITY CLASSIFICATION

**Software Resources Data Report: Final Developer Report**

Due 60 Days After Final Software Delivery and 60 Days After Delivery of Any Release or Build

Page 1: Report Context, Project Description and Size

**1. Report Context**

1. System/Element Name (version/release): <b>Peace of Mind- 1000</b> <b>WBS 1.1.4 Application Software/WBS 1.1.5 System Software</b>	2. Report As Of: <b>5/31/2008</b>
---	-----------------------------------

3. Authorizing Vehicle (MOU, contract/amendment, etc.):

**D12345-06-C-7890**4. Reporting Event: **Release 1 End**Submission # **1**

(Supersedes # , if applicable)

**Description of Actual Development Organization**

5. Development Organization:

**ACME Home Security Company**6. Certified CMM Level  
(or equivalent): **4**7. Certification Date: **5/1/2005**8. Lead Evaluator: **Matt Shurety**9. Affiliation: **SPI, Inc**

10. Precedents (list up to five similar systems by the same organization or team):

**POM-500, Smoke Detective-1000, Illumina II**Comments on Part 1 responses: **Report prepared per CSDR contract plan USLQC-03-C-C1**

**Provide a specific prime contract number. Do not use general terms like 'CPAF SDD contract'.**



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**D12345-06-C-7890**

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9. Affiliation: **SPI, Inc**

10. Precedents (list up to five similar systems by the same organization or team):

**POM-500, Smoke Detective-1000, Illumina II**

Comments on Part 1 responses: **Report prepared per CSDR contract plan U**

*The default dictionary definition of reporting event uses generic labels such as 'Project/Release Start'. Please use specific terms.*



# Section 1: Report Context

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**POM-500, Smoke Detective-1000, Illumina II**Comments on Part 1 responses: **Report prepared per CSDR contract plan USLQC-03-C-C1**

*Please identify the  
corresponding CSDR  
contract plan.*



# Section 2: Product and Development Description

2. Product and Development Description	Percent of Product Size	Actual Development Process	Upgrade or New?
1. Primary Application Type: <b>Command &amp; Cntrl</b>	2. <b>100 %</b>	3. <b>Incremental</b>	4. <b>Upgrade</b>
5. Secondary Application Type:	6. %	7.	8.
9. Third Application Type:	10. %	11.	12.
13. Fourth Application Type:	14. %	15.	16.
17. Primary Language Used:	18. %		
19. Secondary Language Used:	20. %		
21. List COTS/GOTS Applications Used: <b>I-SPY SDK, Red Hat Linux, Open GL</b>			
22. Peak staff (maximum team size in FTE) that worked on and charged to this project: <b>15</b>			
23. Percent of personnel that was: Highly experienced in domain: <b>50%</b> Nominally experienced: <b>25%</b> Entry level, no experience: <b>25%</b>			
Comments on Part 2 responses:			



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Comments on Part 2 responses:			

***A standard list of SW application types can be found in Section 3.7 of the DoD 5000.4-M-2 SRDR Manual.***





# Section 2: Product and Development Description

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23. Percent of personnel that was: Highly experienced in domain: <b>50%</b> Nominally experienced: <b>25%</b> Entry level, no experience: <b>25%</b>			
Comments on Part 2 responses:			

**Peak staffing reported in Section 2 should be consistent with the effort data reported in Section 4.**



# Section 3: Product Size Reporting

3. Product Size Reporting		Provide Actuals at Final Delivery
1. Number of Software Requirements, not including External Interface Requirements (unless noted in associated Data Dictionary)		50
2. Number of External Interface Requirements (i.e., not under project control)		5
3. Amount of Requirements Volatility encountered during development (1=Very Low .. 5=Very High)		2
Code Size Measures for items 4 through 6. For each, indicate <u>LS</u> for physical SLOC (carriage returns); <u>src</u> for noncomment SLOC only; <u>LS</u> for logical statements; or provide abbreviation _____ and explain in associated Data Dictionary.		
4. Amount of New Code developed and delivered (Size in <u>LS</u> )	1.1.4 Application SW 1.1.5 System SW	55,000 40,000
5. Amount of Modified Code developed and delivered (Size in <u>LS</u> )	1.1.4 Application SW 1.1.5 System SW	26,000 31,000
6. Amount of Unmodified, Reused Code developed and delivered (Size in <u>LS</u> )	1.1.4 Application SW 1.1.5 System SW	11,000 16,000
Comments on Part 3 responses:		



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6. Amount of Unmodified, Reused Code developed and delivered (Size in <u>LS</u> )	1.1.4 Application SW	11,000
	1.1.5 System SW	16,000
Comments on Part 3 responses:		

***The data should be relevant to Release 1 Only. It should not reflect a running cumulative total. If not, then the comment section should be used to explain why the data doesn't reflect Release 1.***

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3. Product Size Reporting		Provide Actuals at Final Delivery
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	1.1.5 System SW	16,000
Comments on Part 3 responses:		

**ACME chose to consolidate their reporting of the specific SW elements identified in ACME's CSDR contract plan.**



# Section 4: Resource and Schedule Reporting

4. Resource and Schedule Reporting		Provide Actuals at Final Delivery		
Counting from month 1 at contract award, provide Actual Start and End Month for each activity shown. Provide the Actual Total Labor Hours for each activity shown.		Start Month	End Month	Total Hours
The following seven items should account for all direct hours charged to the software development project (use item 7 for any direct hours not accounted for in items 1 through 6). Explain any contribution of indirect hours in the associated Data Dictionary.				
1. Software Requirements Analysis		3/15/2008	3/30/2008	14,318
2. Software Architecture and Detailed Design	1.1.4 Application SW	3/19/2008	4/5/2008	8,743
	1.1.5 System SW	3/19/2008	4/8/2008	17,992
3. Software Coding and Unit Testing	1.1.4 Application SW	3/26/2008	4/9/2008	4,819
	1.1.5 System SW	3/30/2008	4/11/2008	21,669
4. Software Integration and System/Software Integration		3/31/2008	4/14/2008	14,604
5. Software Qualification Testing		4/5/2008	5/14/2008	10,476
6. Software Developmental Test and Evaluation		5/15/2008	5/31/2008	10,497
7. All Other Direct Software Engineering Development Effort (Describe: <b>Software Prg Mgt, Software Quality Assurance, SW Configuration Mgt</b> )				25,422
Comments on Part 4 responses:				



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7. All Other Direct Software Engineering Development Effort (Describe: <b>Software Prg Mgt, Software Quality Assurance, SW Configuration Mgt</b> )				25,422
Comments on Part 4 responses:				

**Effort and schedule should reflect Release 1 only.**



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Comments on Part 4 responses:				

***Within ACME's accounting system, these activities are measured for each software component. ACME has chosen to consolidate this information instead of populating separate SRDR forms for each SW component.***



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7. All Other Direct Software Engineering Development Effort (Describe: <b>Software Prg Mgt, Software Quality Assurance, SW Configuration Mgt</b> )				25,422
Comments on Part 4 responses:				

**Within ACME's accounting system, these activities are NOT measured for each software component**





# Section 4: Resource and Schedule Reporting

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7. All Other Direct Software Engineering Development Effort (Describe: <b>Software Prg Mgt, Software Quality Assurance, SW Configuration Mgt</b> )				25,422
Comments on Part 4 responses:				

***Schedule data should be specific to the software development activity.***

# Submitting the SRDR

- Question: Is the SRDR ready for submission and is it capable of passing validation?

# Submitting the SRDR

- Question: Is the SRDR ready for submission and is it capable of passing validation?
- Answer: **NO**. An SRDR data dictionary must accompany the SRDR. Contractors must prepare, update (when necessary) and submit a dictionary for each SRDR submission.
- Referencing the stock dictionary within DoD 5000.4-M-2 SRDR manual is not acceptable. The dictionary (and of course the data) must be tailored and specific to the contractor's internal definitions.



# SRDR Validation Checklist

- ★ Has the SRDR been submitted in MS Excel compatible format?
  - Have multiple software elements been combined into one SRDR file?
  - ★ Has information been provided for all data fields?
  - ★ Have SRDRs been provided for every WBS element requiring SRDRs?
  - ★ Does the data in the SRDR reflect proper scope? (i.e. Data for Increment Start/Finish should reflect that increment only)
    - Does the SRDR identify the relevant CSDR contract plan #?
    - Does the SRDR reference the appropriate reporting event?
    - Does the SRDR reference an appropriate
  - ★ Did the SRDR reported sizing reflect delivered size?
  - ★ Did the SDRDR avoid the use of ESLOC?
  - ★ Does reported peak staffing make sense? (Is peak staffing  $\geq$  average staffing?)
  - ★ Are sub-contractor software sizing and effort data clearly identified in the prime's SRDR data?
  - ★ Does the reported effort, given reported software size, make sense?
  - ★ Does the reported schedule appear logical?
- ★ Denotes a major error that will result in a rejection of the SRDR submitted



# SRDR Dictionary Checklist

- ★ Was an SRDR data dictionary provided with the submission?
- ★ Does the dictionary provide an adequate functional description of the each software item reported?
- ★ Does the dictionary provide an adequate characterization of software development work performed on each software item?
- ★ Does the dictionary provide a specific definition describing how requirements count and external interfaces are tallied?
- ★ Does the dictionary indicate what software development activities were included in peak staff metric?
- ★ Does the dictionary provide a specific definition of software sizing?
  - ★ What is counted (i.e. carriage returns, semi-colons, etc)
  - ★ What sources are included (.h files, common SLOC, batch files, etc)
  - ★ What are the definitions of new, modified, reused, etc
  - ★ What rules are used to classify SLOC into new, modified, reused, etc
- ★ Does the dictionary provide adequate definitions of software development activities in Section 4? (Not looking for a textbook definition, looking for accounting definition)
- ★ Does the dictionary provide enough information to understand how sub-contractor data is treated in the SRDR?
- ★ If the SRDR contain any other unusual data, was it explained in the dictionary?
- ★ Is the data dictionary specific to the SRDR report?

Example: Referring to estimated software size in a final developer report

★ Denotes a major error that will result in a rejection of the SRDR submission

# Submitting the SRDR

- The SRDR and associated dictionary are uploaded by the contractor to the DCARC secure website
- The contractor must complete a one-time registration on DCARC's website and obtain a web-browser security certificate that allows the contractor to upload data to the DCARC website
- MS Excel compatible format is the required format for delivering the SRDR data. MS Word, MS Excel, or Adobe Acrobat are acceptable formats for delivering the SRDR dictionary.

# Additional Resources

- February 2004 draft SRDR manual (Adobe Acrobat Format)  
<http://dcarc.pae.osd.mil/srdr/DOD50004M2.pdf>
- DD Form 2630-1, 2630-2, 2630-3 (MS Excel Format)  
[http://dcarc.pae.osd.mil/srdr/srdr\\_form\\_022004.xls](http://dcarc.pae.osd.mil/srdr/srdr_form_022004.xls)
- DD Form 2630-2 CDRL (Adobe Acrobat Format)  
[http://dcarc.pae.osd.mil/srdr/srdr\\_ch5\\_cdrl\\_022004.pdf](http://dcarc.pae.osd.mil/srdr/srdr_ch5_cdrl_022004.pdf)
- DD Form 2630-3 CDRL (Adobe Acrobat Format)  
[http://dcarc.pae.osd.mil/srdr/srdr\\_ch5\\_cdrl-3\\_022004.pdf](http://dcarc.pae.osd.mil/srdr/srdr_ch5_cdrl-3_022004.pdf)

# Outline

- Introduction
- CSDR Training
  - Plans
    - Program and Contract Plans
    - Unique Program Plan Considerations
    - Unique Contract Plans Considerations
  - Cost Data Collection
    - Reporting Forms
    - Validation
  - Software Resource Data Reports

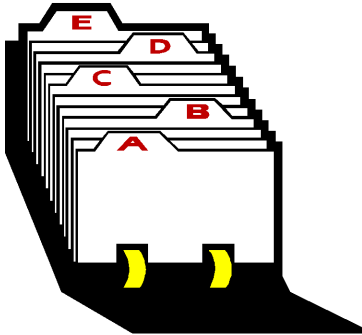


# Review of Course Objectives

- Provided an overview of weapon systems acquisition and the role of CSDRs in the cost estimating process
- Presented information and guidance needed to implement the current cost reporting policies
- Reviewed and demonstrated through example, the preparation of cost reporting plans and cost reports
- Explained importance of cost reporting and uses of cost data



# Contacting DCARC



D

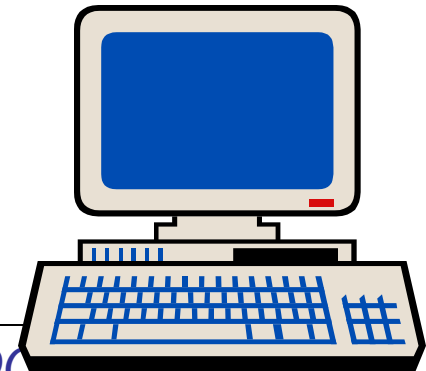
**DCARC**

**VOICE 703-601-4850**

**FAX 703-604-1012**



<http://dcarc.pae.osd.mil/>



## Extensions/Email Addresses for Government POC's:

- Dr. Ron Lile: x154 (Ronald.Lile@osd.mil)
- Mr. Mike Augustus: x152 (Mike.Augustus@osd.mil)



# Acronym Reference List

<b>ACAT</b>	Acquisition Category
<b>ACO</b>	Administrative Contracting Officer
<b>AIS</b>	Automated Information Systems
<b>AMPR</b>	Aeronautical Manufacturers' Planning Report
<b>ANSI</b>	American National Standards Institute
<b>ASC</b>	Accredited Standards Committee
<b>AUW</b>	Airframe Unit Weight
<b>BCWP</b>	Budgeted Cost of Work Performed
<b>BCWS</b>	Budgeted Cost of Work Scheduled
<b>C&amp;TD</b>	Concept and Technology Development
<b>C/ SCSC</b>	Cost/Schedule Control System Criteria
<b>C/ SSR</b>	Cost/Schedule Status Report
<b>CAIG</b>	Cost Analysis Improvement Group
<b>CARD</b>	Cost Analysis Requirements Description
<b>CCA</b>	Component Cost Analysis
<b>CCDR</b>	Contractor Cost Data Reporting
<b>CCDRs</b>	Contractor Cost Data Reports
<b>CCDR-PO</b>	Contractor Cost Data Reporting Project Office (Now the DCARC)
<b>CDRL</b>	Contract Data Requirements List
<b>CDSR</b>	Cost Data Summary Report (DD Form 1921)
<b>CER</b>	Cost-Estimating Relationship
<b>CFSR</b>	Contract Funds Status Report
<b>CIPTCIPT</b>	Cost Integrated Product Team
<b>CIR</b>	Cost Information Report
<b>CLIN</b>	Contract Line Item Number
<b>CNA</b>	Center for Naval Analyses
<b>COEA</b>	Cost and Operational Effectiveness Analysis
<b>COTS</b>	Commercial Off-The-Shelf
<b>CPAF</b>	Cost Plus Award Fee
<b>CPFF</b>	Cost Plus Fixed Fee
<b>CPI F</b>	Cost Plus Incentive Fee
<b>CPI F/ AF</b>	Cost Plus Incentive Fee/Award Fee
<b>CPR</b>	Cost Performance Report
<b>CRS</b>	Clearinghouse Repository System
<b>CS</b>	Cost Sharing
<b>CSDR</b>	Cost and Software Data Reporting



# Acronym Reference List (cont.)

<b>CWBS</b>	Contract Work Breakdown Structure
<b>CWIPT</b>	Cost Working Integrated Product Team
<b>DAB</b>	Defense Acquisition Board
<b>DAD</b>	Defense Acquisition Deskbook
<b>DCAA</b>	Defense Contract Audit Agency
<b>DCARC</b>	Defense Cost and Resource Center
<b>DCAAM</b>	Defense Contract Audit Agency Manual
<b>DCPR</b>	Defense Contractors' Planning Report
<b>DFARS</b>	Defense Federal Acquisition Rules Supplement
<b>DID</b>	Data Item Description
<b>DoD</b>	Department of Defense
<b>DoDD</b>	Department of Defense Directive
<b>DoDI</b>	Department of Defense Instruction
<b>DSARC</b>	Defense Systems Acquisition Review Council
<b>EAC</b>	Estimate At Completion
<b>EDI</b>	Electronic Data Interchange
<b>EG</b>	Electronic Generation
<b>EMD</b>	Engineering and Manufacturing Development
<b>EVMS</b>	Earned Value Management System
<b>FAR</b>	Federal Acquisition Regulation
<b>FCHR</b>	Functional Cost-Hour Report (DD Form 1921-1)
<b>FCP/ RPR</b>	Fixed Cell Price with Retroactive Price Determination
<b>FFP</b>	Firm Fixed Price
<b>FFP/ LOET</b>	Firm Fixed Price, Level Of Effort Team
<b>FFRDC</b>	Federally-Funded Research & Development Corporation
<b>FICA</b>	Federal Insurance Contribution Act
<b>FP/ AF</b>	Fixed Price with Award Fee
<b>FP/ EPA</b>	Fixed Price with Economic Price Adjustment
<b>FP/ PRD</b>	Fixed Price with Prospective Price Redetermination
<b>FP/ RPD</b>	Fixed Price with Retroactive Price Determination
<b>FPIF</b>	Fixed Price Incentive Fee
<b>FPI S</b>	Fixed Price Incentive Successive
<b>FY</b>	Fiscal Year
<b>G&amp;A</b>	General and Administrative
<b>ICE</b>	Independent Cost Estimate
<b>IDA</b>	Institute for Defense Analyses



# Acronym Reference List (cont.)

<b>LC</b>	Letter Contract
<b>LMI</b>	Logistics Management Institute
<b>LRIP</b>	Low-Rate Initial Production
<b>MAIS</b>	Major Automated Information System
<b>MD</b>	Material Developers
<b>MDAP</b>	Major Defense Acquisition Program
<b>MIL-HDBK</b>	Military Handbook
<b>MIL-STD</b>	Military Standard
<b>MMPR</b>	Missile Manufacturers' Planning Report
<b>MSEMPR</b>	Missile Support Equipment Manufacturers' Planning Report
<b>MYP</b>	Multi-Year Procurement
<b>NASA</b>	National Aeronautics and Space Administration
<b>OIPT</b>	Overarching Integrated Product Team
<b>OIT</b>	On-the-Job Training
<b>OSD</b>	Office of the Secretary of Defense
<b>PA&amp;E</b>	Program Analysis and Evaluation
<b>PCO</b>	Procuring Contracting Officer
<b>PCR</b>	Progress Curve Report (DD Form 1921-2)
<b>PDRR</b>	Program Definition and Risk Reduction
<b>PERT</b>	Program Evaluation and Review Technique
<b>PIR</b>	Procurement Information Report
<b>PM</b>	Program Manager
<b>POC</b>	Point Of Contact
<b>POE</b>	Program Office Estimate
<b>POTS</b>	Plain Old Telephone Service
<b>PPBS</b>	Planning, Programming, and Budgeting System
<b>RDT&amp;E</b>	Research, Development, Test and Evaluation
<b>RFP</b>	Request For Proposals
<b>SAR</b>	Selected Acquisition Report
<b>SDD</b>	System Development and Demonstration
<b>SE</b>	Systems Engineering
<b>SRDR</b>	Software Resources Data Reporting
<b>SSL</b>	Secured Socket Layer
<b>TIF or TIFF</b>	Tagged Image (Format) File
<b>WBS</b>	Work Breakdown Structure